A black and white photograph of a swampy forest. Large, gnarled trees with thick trunks are the central focus, their branches heavily laden with Spanish moss that hangs down like curtains. The ground is a mix of water and dense vegetation, including palm-like plants in the foreground. The overall atmosphere is quiet and somewhat mysterious.

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OUR COVER PICTURE

This month's cover picture shows the stream flowing from Sanlando Springs—600,000 gallons per hour—sparkling clear water—always at a temperature of 72 degrees. Sanlando Tropical Park, a favorite central Florida watering place, lies between Orlando and Sanford in the midst of a primeval forest, a spot visited by thousands annually. Photo by Burgert Bros., Tampa.

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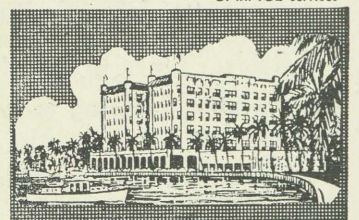
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New G. I. Version: Praise the Lord, the ammunition passed me.

Old Timer: One who can remember when a bureau was a piece of furniture.

Just back from the European war front, Al Lodwick, speaking at a dinner in his honor in Lakeland, said that the Eighth Air Force alone had dropped more bombs on Germany in one week than the Germans had dropped on England in 5 years.

A bull from the herd of Henry O. Parlin & Sons, Kissimmee and a cow from the ranch of Norris Cattle Co., Ocala, shared grand championship honors at the Florida Registered Brahman Show. Both animals were Florida bred and raised.

In an effort to develop a type of sugarcane best suited for growth and development in the Everglades, the research laboratories of the United States Sugar Company at Clewiston have records on more than 150,000 different crosses, varieties and strains of cane from which the six best are now in use in the company fields.

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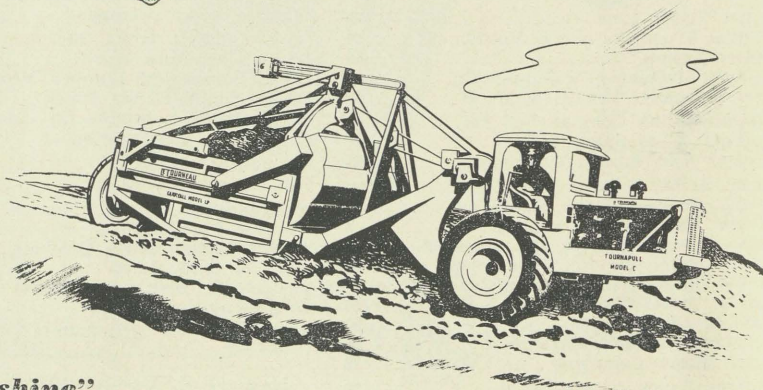
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FLORIDA FOURTH ESTATE

Caldwell Urges Self-Help

MAYBE OUR NEW governor has started a New Deal of his own, in reverse, for he now advocates the strange doctrine that cities and counties should learn to do things for themselves and not lean on State and Federal government.

More than that, he strongly intimates that he not only advises this course but makes it a part of his policy not to do for small government units what they can accomplish without State help.

This coincides with views expressed previously in these columns that the way to economic freedom is through individual and community effort, for that is the way this Nation became great in the first place.

But the depression caused the government to take relief measures to prime the pump and the States and smaller units got to leaning on the government instead of taking advantage of Federal aid to get back to self-support.

Because of this habit of taking the easy way, cities, counties and States stood by while the central government moved in and took over responsibilities the other units had always met and which they are still able to meet.

The way to have less government from Washington is for every community to reenter the field of self-government and take up the burdens that belong to it and to plan to develop through its own efforts.

That is the manly way, the American way and the only proved way to restore and maintain private enterprise and have at home the authority over how a community is to grow and prosper and conduct its affairs, public and personal.

Government help means likewise a government say-so in how things are to be done, so if people want to run their local affairs they must assume the financial and other responsibilities essential to their conduct.

We think the Caldwell idea is a wholesome one and a tonic to individual effort, civic planning and a return to sturdy endeavor, for who is satisfied with a system that causes communities to shirk their responsibilities and lean on a higher government to perform their tasks and pay for them?

The idea that the government really pays for the cost of undertakings in a State, city, or county is a fallacy anyhow, for the money comes from the very people who get it back in reduced volume when the government administers it.

Everywhere you hear people criticize the restrictions under which they must operate, when their real criticism should be against themselves for having vacated their proper fields and turned them over to the government.—Orlando Sentinel.

A Mouthful

GOVERNOR CALDWELL, hitting out at civic slackers said a mouthful when he expressed impatience with people who refused to participate in politics because it's "dirty."

Caldwell told a Southern College Founders audience last week that Americans in general and Floridians in particular must learn more about their governments and take an active part in solving their problems "just as close to home as we can."

"Voting is not enough," he declared. "It is a shameful fact that far too few of our people take the trouble to vote at all; these are the worst of our civic slackers."

"Those who do vote, however, need feel no great satisfaction in having waited until election day and then cast a ballot for the least objectionable in a field of unsatisfactory candidates assembled on the basis of their own individual political ambitions."

"It is a vital part of community responsibility to see to it that good men offer themselves for office and that such men are supported by means and effort. * * *

"I do not know of a more dangerous citizen than the well-informed, intelligent man of good motive who holds aloof from politics because 'it is dirty.' If politics are dirty it is the fault of such citizens. They are responsible and they have no right to blame anyone else."

Repeating his frequently stated opposition to too much centralization of government, Governor Caldwell said "it is not the fault of the national government or of the State government * * * that so much local self-determination has been lost."

"It is the fault of the people who ceased to bear themselves erect, it is partly your fault and mine. We have not done all we could, as adult men and women, to straighten out our affairs for ourselves and so we find ourselves being nursed and coddled by a swarm of officials."

"I am not referring, of course, to the wartime restrictions that are made necessary by this grave emergency. I do refer to the gradual but steady infiltration of the larger units of government into the permanent rights and liberties of the smaller local units—to the loss of the rights and benefits of self government."

"Government should be simple, direct, close to the people, well-designed to fit real needs. We have been losing that kind of government and we have been acquiring a kind of government so amazingly complex and involved, so rigid and ill fitting that even skilled attorneys must specialize in order to understand small sections of its manifold functions."

He said that "until the de- (Continued on page 45)

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MAY 1945



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Editor

J. E. ROBINSON, Winter Garden

Publisher

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EDITORIALS

NOTHING IS MORE IMPORTANT THAN WATER

MOST AREAS of the world have enough air and sunshine and Florida has an abundance of both. If we lacked either, we could do nothing about it. Water is the only essential element that we can do anything about and it is the only one that we sometimes lack.

Where there is air and sunshine, nothing else is absolutely necessary to sustain life—except water. With the required equipment, a man could be self-sustaining on the roof of a city building, provided he had an ample supply of water. With water available he could grow vegetables and meat without soil. It has been done. Pictured in this issue are tomatoes grown without soil; they were produced with water and chemicals.

Without water no life can exist. Without ample water no economy can be sustained. If the water supply diminishes far enough, our citrus trees will die, our vegetable fields will produce nothing, our forests will disappear.

Water is more important than schools because, if the water dries up the people will move away to keep from starving to death and there will be no use for schools. Water is more important than roads, because if there is no water the roads will serve no purpose.

Water is the only essential element, subject to man's control, that he cannot get along without. It is the only thing that must be considered in the location of a city or of an industry. With water, a city could exist anywhere. Without it, no city or settlement could survive.

Key West is the only Florida city without a local supply of water other than from rain or distilled sea water. Fresh water is now piped to Key West from the mainland. If the pipe line should break, if the facilities for distilling sea water should fail and if there should be no rain until the cisterns ran dry, there would be no person or animal left alive in Key West a few days afterward, unless water could be shipped in soon enough to save them. The expense of this would require water facilities or abandonment.

If any other Florida city should run out of water it would be abandoned in a short time. When any farming area runs short of water it is always abandoned. There are wastelands in Florida now that once were productive. Water shortage ruined these lands and cost the owners and others serious losses.

The basic occupation of mankind is to produce the necessities of life. When man is able to produce more than enough to keep himself alive he uses the surplus production for comforts and services. Out of those surpluses of production, we finance our schools, health facilities, and services of all kinds.

When economic scarcity tends to reduce production back toward the basic necessities, the services are dropped. After all, man must live and he puts that above all else.

Water shortage is one of the surest means of reducing production to the bare necessities or below. As the surpluses are dropped the services are discontinued. Among the services financed from production are schools, colleges, institutions of all kinds, cultural facilities, health facilities—everything not essential to sustain life itself. Civilization, under severe economic pressure, declines and tends to disappear.

Nothing could be more important, therefore, to the University of Florida, for example, than a continuation of the high rate of production out of which the University of Florida is financed. The life of the university depends on the economy that feeds it. Should the economic system decline and wither, the university will die and be abandoned like a dried-out field.

It is right and proper that citizens should concern themselves with the problems of health, education, welfare, youth delinquency, road building, taxes, governmental administration, conservation of other resources, and all the other manifold issues and questions of the day. There is even more reason for the citizen and governmental official to concern himself with the problem of water supply since, without water, all these other problems lose their significance.

Evidence has accumulated that the water supply of Florida is a real and pressing problem. Already salt water is creeping in to menace the water sources of some of our coastal cities. The stripping of our forests has, with other causes, resulted in releasing water quickly to return to the ocean which otherwise would be stored in lakes or in the ground for future use. The rainfall in Florida may be diminishing as the result of such causes. If it has not already done so, it may. As the land dries out forest fires become more numerous and more damaging and the muck lands burn away unchecked. Under these and other damaging conditions the soil itself loses its fertility or is wasted away in erosion. Truly, something must be done and that quickly.

Florida invites more tourists and residents but visitors and residents will not come and those who are here will not come again if the water supply runs out. Florida seeks more industries but the ones we already have will close down if the water supply runs out. Florida seeks to increase the earnings of our own people and from their surpluses above necessities, to improve their standing in education, health, and welfare but, if lack of water should reduce production our people will cease to sustain their institutions and services—finally they will move away or drop back to first essentials.

An industry can import or (Continued on page 39)



Cities must have vast quantities of fresh, pure water daily. Above scene of downtown section taken from the air of Miami—Miami Beach in background.

By HENRY S. WRENN

WATER IS ONE natural resource without which neither man, nor plant, nor animal can live.

Florida has a lot of water but it also has a water conservation problem. Solving that problem, or at least getting started toward a solution, is a primary objective of Governor Millard F. Caldwell.

Water is the lifeblood of all phases of agriculture. If the water supply runs out or becomes infiltrated with salt, this grove will die and these men will be out of work.



FLORIDA PLANS

Control and conservation of water supply is necessary to maintain Florida agriculture, forests, and cities.

Waste of this resource can have disastrous effects. Farm lands can cease to be productive, from lack of water, from flooding, or from an overbalance that results in salt water infiltration. Forests become prey to fires when ponds are carelessly drained. The water supplies of cities can be destroyed.

Knowing these facts, Governor Caldwell, even before his inauguration, asked for the appointment of a State-wide committee to study water resources. It was appointed by Spessard L. Holland, then governor, on Dec. 29, 1944 and it started work immediately.

Members of the committee are A. D. Pace of Pensacola, Amos Davis of Quincy, Leonard Wesson of Tallahassee, George Pierce of Jacksonville, Mark Fleishel of Cross City, Sen. Wallace Sturgis of Ocala, Lacy Thomas of Groveland, Henry Partin of Kissimmee, former Governor Doyle E. Carlton of Tampa, Frank Holland of Winter Haven, Senator Harry King of Winter Haven, Warren Roberts of Orlando, A. B. Michael of Wabasso, Sam Chastain of Pahokee, Frank Sterling of Davie, William A. Glass of Miami, W. A. Leffler of Sanford, Leo H. Wilson of Bradenton.

The committee, which held meetings in various parts of the State in a survey of water resources and conservation, recommended establishment of the Florida Department of Water Resources to carry forward surveys of fact-finding, planning, promoting, and protective work.

The department, if created, would have authority to coordinate water supply activities of the State Road Department, the Forest and Park Service, the Game and Fresh Water Fish Commission, the Geological Survey, the State Board of Health, and other agencies. It also would pass upon contemplated new drainage projects or changes in present drainage undertakings. It would have power to prevent wastage of water from open wells, and it would have power to control the water levels in natural or artificial reservoirs as a step toward protecting the natural water tables.

Another major undertaking of the department would be the planning for restoration of lands damaged by water shortages or by salt infiltration. It would not, however, have authority to make capital investments.

One member would be appointed from each of the State's six congressional districts and one from the State at large. There would be a water resources engineer, a secretary, and necessary clerical help. An appropriation of \$150,000 annually is recommended.

The water resources committee also recommended appointment of a legislative committee to make a continuous study of water problems so that legislators would be thoroughly familiar with any changes that might be needed in succeeding sessions of the legislature.

"Based on what we have seen and heard in our meetings," the governor's committee reported, "the committee feels that the State must make an immediate start on a vigorous program to conserve, protect, develop, control, and utilize its water re-

TO SAVE WATER SUPPLY

sources for the public service. Such a program appears to be necessary if our State is to maintain its present population and economic development—much less increase them in some important areas.”

The committee also recommended that the Florida State Improvement Commission, created in 1941, be used as the agency for actual construction and development of water projects, and for providing the local cooperation necessary to develop participation of Federal agencies in water conservation programs. Cities, counties, and districts also would serve as cooperating agencies.

“Water problems exist to varying extents in many sections of this State, extending from the Miami area up through most of the western part of the State,” the committee declared. Then it pointed out that “most of that part of Florida lying south and east of the Suwannee River has no water connections with the remainder of the United States, either surface or underground, and therefore is practically an island with reference to water supplies and problems.

“Proper drainage has played an important part in the economic development of the State. Uncon-

trolled and unwise drainage has played a big part in bringing about much of the present water problem.”

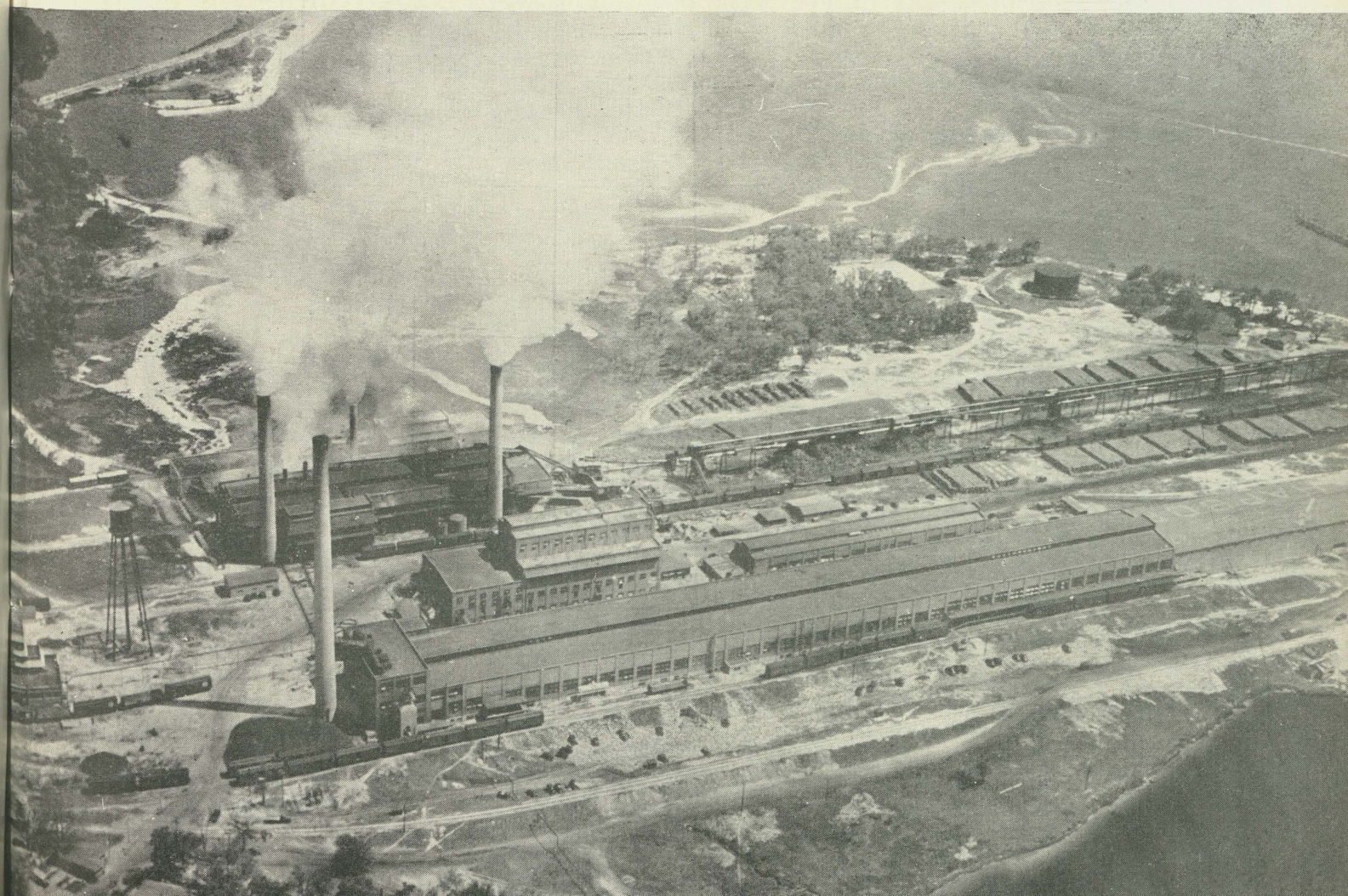
The committee found there are 145 drainage districts in the State, ranging from little districts to one embracing millions of acres. Although it placed no blame upon any of the districts, the committee said the original programs were concerned only with local drainage and did not contemplate nor include water conservation.

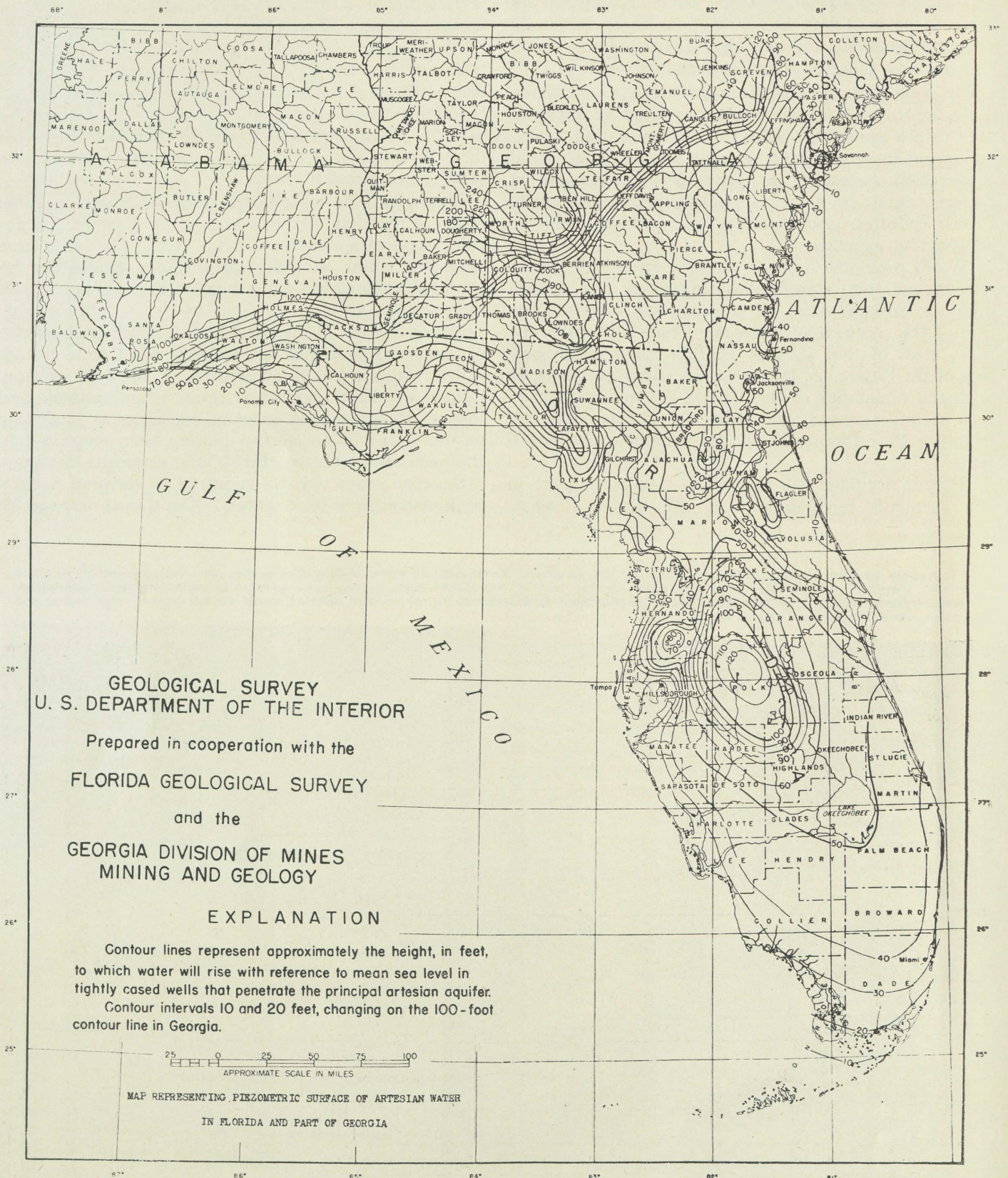
Carefully planned changes may be made in some of these districts which would carry forward the development of agricultural lands and at the same time conserve water so that water tables would not be lowered beyond the danger point that brings in salt infiltration.

Beach erosion is included by the committee as one of the water problems. It recommended some system of controlling beach structures to prevent erosion. “There has been apparently much actual damage and loss to citizens and to counties and cities in this State as the result of no control having been exercised in the past over such structures,” the committee declared.

Several years will be required to develop a comprehensive State-wide water (Continued on page 39)

Industries live on water. Such industries as the Southern Kraft mill at Panama City shown here use vast quantities of water. No other industries will be established and those already located will close down in any area where the water supply is diminished below industrial needs. The resulting loss of employment and business in any area so affected would be felt over a large region and, to some extent, throughout the State.





Florida's Water Supply . . .

ARTESIAN WATER, one of nature's great blessings to our State, is all too generally thought to be an inexhaustible commodity that may be used or wasted as freely as we wish. This assumption is not true. It is exhaustible. The supply is dependent upon two unalterable factors: Rainfall, and the characteristics of the water-bearing formations. Obviously, we can only accept the rain as it comes and do nothing to alter the amount, but we can control the run-off and make provisions for conserving it; likewise, we can only be content with the nature of the rocks beneath us that have been formed in past ages by long and varied geologic processes but, with adequate knowledge of their occurrence and characteristics, water supply developments and conservation measures can be planned to best advantage.

The statement was just made that the supply of artesian water is dependent upon the rainfall. That this fact is none too well understood is indicated by the questions nearly always asked when water supplies are discussed. Such questions clearly reveal that a very popular conception is that our ground water has its origin in the upland region of north Georgia, the mountains of North Carolina, or even more remote regions. It is not necessary to postulate such distant sources, neither is it correct. Florida has such an abundant rainfall that all of the water yielded to our thousands of water wells and our many large limestone springs can be accounted for through rainfall within the State and within the southern portions of the bordering States of Georgia and Alabama.

The surface formations of Florida are such as to admit absorption readily, and over large areas of the State limestone occurs either at the surface or so close to it that the rainfall passes almost directly to these formations. The topography is rolling to level, with

By DR. HERMAN GUNTER
Director Florida Geological Survey

a porous soil mantle, thus surface run-off is small, as compared to regions where such favorable conditions are not present.

The average annual rainfall as recorded by the U. S. Weather Bureau to the end of 1944 for a number of long-record stations is as follows (all figures in inches):

For the State as a whole, 52.77; the northern part, 53.45; and the southern part, 52.08.

From Jacksonville west—Jacksonville, 45.86; Madison, 52.50; Marianna, 54.69; Apalachicola, 58.51; Pensacola, 58.03; showing a gradual increase westward.

From Jacksonville south—Jacksonville, 45.86; St. Augustine, 48.25; Merritt Island, 50.74; Fort Lauderdale, 65.19; Miami, 57.85; Key West, 38.15; showing an increase to Fort Lauderdale and a decrease from there to Key West.

From Gainesville south through the central portion of the State—Gainesville, 48.90; Orlando, 52.35; Bartow, 55.31; Moore Haven, 55.31; showing a slight increase southward.

From Cedar Key south along the Gulf coast—Cedar Key, 45.30;

Tampa, 49.46; Fort Myers, 52.39; showing a slight increase southward.

But during some years, particularly 1944, the rainfall varies a great deal locally from these averages, and such wide fluctuations radically affect the surface and ground water conditions. Some of these variations from normal at a few weather bureau stations are: (+ with figure represents number of inches above normal; — with figure represents number of inches below normal).

Northern portion—Jacksonville, +18; Madison, +12; Tallahassee, +10; DeFuniak Springs, +16; showing more than average rainfall.

Southern portion—Miami, —29; Fort Lauderdale, —23; West Palm Beach, —13; Okeechobee, —11; Fort Myers, —18; Arcadia, —8; Bradenton, —25; Tampa, —14; showing a great deficit in rainfall which has materially affected the water conditions in that section.

Central portion—DeLand, +13; St. Augustine, +10; Sanford, +14; Titusville, +13; Gainesville, +8; Ocala, —8; Orlando, —3; showing in general more than average rainfall. The decreased supply of rainfall in southern Florida during 1944 together with less than normal amounts during 1943 and

Aerial view of Kissimmee River.





1942 has been one of the main factors contributing to the depleted water supply in that portion of the State. Such fluctuations in amount of rainfall can be expected and efforts should be made to combat as much as possible their bad effects, either producing flood or drought conditions.

The variable but large quantity of water that finds its way annually into the underlying formations implies that large quantities are held in storage and also that large quantities find ready escape through springs. Florida has many limestone springs, some of the most beautiful in the world. Their influence on the level of our artesian water supply is clearly apparent. From a study of artesian conditions and records of many wells throughout the State and southern Georgia the U. S. Geological Survey through cooperation with the Georgia and the Florida Geological Surveys has recently drawn a map indicating the height to which water will rise in different portions of Florida and southern Georgia. A copy of this map is reproduced and by reference to it one can at once determine those areas in which rain water finds entrance to the limestone, or areas of "recharge," as they are termed, as well as learn the height to which water stands with reference to sea level in drilled wells that have been properly constructed and completed. In general, recharge is indicated where the water level is high and discharge is indicated where it is low.

An understanding of the occurrence of artesian water and the problems connected with it is dependent upon at least a general knowledge of the leading features of the geology. The more we know of the geological features of the

Photo courtesy of Nydegger Investment Company through U. S. Geological Survey.

Spouting drainage well, south side of Lake Fairview, near Orlando. Height of spout more than 100 feet. Note: Air carried into well along with the water draining into it is trapped in the crevices of the underlying limestone and compressed until sufficient pressure has developed which forces some of the water out and hence the "spouting."

FLORIDA HIGHWAYS

State the more satisfactorily can we deal with the many questions arising in connection with the water supply.

Florida is underlain by a series of sands, clays, marls, and limestones of varying ages, these latter generally massive and very thick. Although variable in character, the Ocala limestone, the best known water-bearing formation, is characteristically soft, quite granular, and usually porous. Locally, however, it is known to become quite close grained and fairly dense, under which condition it yields but little if any water.

Below this granular and porous limestone there is usually a brown to dark brown limestone which resembles brown sugar in appearance. It is partially crystallized, ordinarily porous, generally yielding water quite readily, but again locally it is dense, hard, and yields water very sparingly. This limestone usually is dolomitic, the double carbonate of calcium and magnesium.

To more clearly present an outline and brief discussion of artesian water in Florida, it is helpful to have a graphic picture of the geologic formations of the State. The following geologic timetable has been prepared, beginning with the youngest and continuing in orderly age succession to the oldest exposed formations. Formations penetrated by the very deep borings (deepest 13,512 feet) for oil are not indicated in this table, only those exposed at the surface or penetrated within reasonable depth and having an important place as a source of artesian water in Florida.

GEOLOGIC FORMATIONS*

Pleistocene

Lake Flint marl—Fresh water marl and limestone of late Pleistocene and Recent ages.

Miami oolite—Cross-bedded oolitic limestone. Supplies water to many wells. A good aquifer.

Anastasia formation—Coquina, shell marl, sand, and sandy limestone. Some sections yield very satisfactory supply of water.

Key Largo limestone—Coral reef.

* Adapted from the legend accompanying Geology Map of Florida by Dr. C. Wythe Cooke, United States Geological Survey, and published by the Florida Geological Survey, 1945. This map will accompany Bulletin 29 now in press.



Flowing well on property of Will Gibson on Coconut Road Sec. 8. Twp. 47, Rge. 25E., about 9 miles west of a railroad and 1.2 miles west of the junction of Coconut Road with Tamiami Trail. This junction is about 5.6 miles north of Bonita Springs. Depth of well 899', 6", 200' cased. Temperature 85 degrees F. Chloride 1150. (Pressure or head 24½ ft. above 6" nipple which is 12 feet above sea or total head of 36½ ft. above sea. Volume, 375 gallons per minute.

Fort Thompson formation—Marine shell marl alternating with fresh water limestone. Poor aquifer. Water highly mineralized.

Pliocene

Alachua formation—Hard rock phosphate, sand, and sandy clay.

Bone Valley formation—Pebble phosphate, marine, and estuarine sand and clay.

Citronelle formation—Sand and clay including the kaolin deposits. Some sections yield fairly good volume of excellent water, especially in western Florida.

Caloosahatchee marl—Marine, sandy, shell marl. Poor formation for dependable water supply.

Buckingham marl—Marine, cream-colored, phosphatic clay marl. Very poor aquifer, impermeable.

Charlton formation—Marine calcareous clay and limestone. Very limited development in Florida.

Tamiami formation—Sandy limestone and calcareous sandstone. Most important water-bearing formation of southern Florida.

Miocene

Duplin marl (Formerly Choctawhatchee)—Greenish-gray, sandy and clayey, micaceous shell marl, and phosphatic limestone. The phosphatic limestone phase occurs in the peninsula. Fair source of water for wells in western Florida especially.

Shoal River formation—Greenish-gray, sandy, and clayey shell marl, weathering to a fine, yellow micaceous sand. A fairly good aquifer in western Florida.

Chipola formation—Gray, calcareous, clayey, and sandy marl. A very good source of ground water supply in western Florida.

Hawthorn formation—Sandy phosphatic limestone, marl, and sandstone, interbedded with vari-colored sandy clay. Includes commercial deposits of fuller's earth. A good source of ground water supply, capacity depending on local conditions.

Tampa limestone—Fairly hard, compact, white to brown limestone, finely sandy. Commonly occurring in large boulders interbedded in a matrix of clayey sand. An important water-bearing formation.

Oligocene

Flint River formation—Hard limestone, altered through solution, leaving a residue of pebbly limestone, sand, and gravel. A good water-bearing formation in local areas.

Suwannee limestone—Granular to dense, compact, cream-colored limestone of varying purity. A good water-bearing formation.

Byram limestone—Hard white limestone as on Suwannee River, yellowish sandy limestone in western Florida. Limited development, therefore unimportant water-bearing formation.

Marianna limestone—Soft creamy-white limestone, resembling chalk. Very permeable, contains cavities and caverns, but comparatively unimportant as a water-bearing formation on account of its limited areal extent and thickness.

Eocene

Ocala limestone—Creamy-white to white, soft, granular, homogenous limestone. This limestone with the older Eocene limestones, recently recognized from surface exposures in peninsular Florida, comprise the most important water-bearing formations in Florida.

(Continued on page 41)

Water and Agriculture . . .

By **NATHAN MAYO**
Commissioner of Agriculture

MAN'S EXISTENCE on earth depends on his ability to make the soil yield him a sustenance. This cannot be done without the proper utilization of water.

Nature furnishes to Florida an ample supply of water each year, if it is used to the best advantage. This has not been done. Florida has no deserts to irrigate. Neither has it snow-covered mountains to furnish water for rivers and lakes, but it has wonderful springs which are really the outlets of underground streams fed from tablelands in the hilly sections.

With nearly five feet of water-fall annually we should not lack for water for crops and other uses. The problem of conservation of water, both for surface and subterranean supply, is largely geological. The formation of soil and subsoil has to be reckoned with in planning a system of control.

Regulating the water table in the Everglades is one problem and the regulation of water table in the hill sections is another. The humidity of the air is an item. Where there is a plentitude of water surface and evaporation is

marked it requires less rainfall than where the climate is dry.

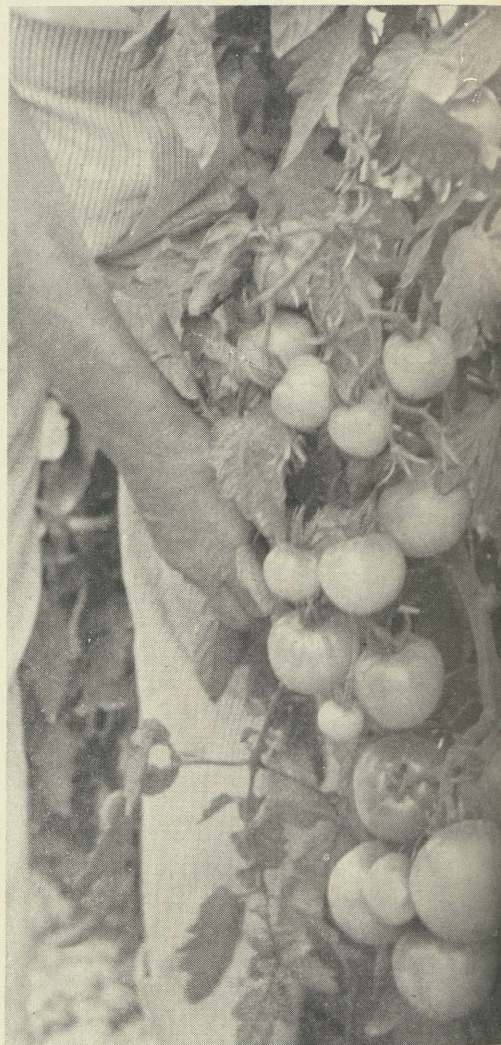
We allow a constant waste of water as though it were of no value. In other places we allow water to inundate lands which could be drained and put to profitable use. We allow wells that were dug for sawmills to run wild after they cease to be used. We are constantly draining water from the interior which furnishes pressure against the salt water around the shores and will eventually allow the saline water to percolate further and further into the land areas from the sea and gulf.

Getting rid of excess waters and preventing droughts is an engineering task and costs money. The State has the only authority and source of revenue capable of carrying out a program of this magnitude.

We have learned by experience that mistakes were made in draining the Everglades. Thousands of acres of muck lands were ruined by fire as a result of an ill-planned system of drainage. This should have been a system planned to take care of a certain area until it was thoroughly mastered before entering another area. Large corporations have demonstrated that water level can be approximately regulated by having large

pumping stations to handle water level requirements by pumping water in when needed and out when not needed, using both the main canals and the lateral canals

(Continued on page 39)



Agriculture and the food processing industries depend upon an adequate water supply. Below a State Farmers Market. At right, tomatoes grown in Orange County without soil—just Florida sunshine, chemicals—and water, showing the importance of that element in food production.



Roads and Water Supply . . .

BEFORE ANY ROAD is constructed in Florida, complete drainage area surveys are made and all high water elevations noted. Also included in the survey is a soil survey with test holes bored to a depth of four feet below the proposed grade to locate any seepage water that might occur below the proposed pavement. The required size and type of drainage structure for each area is carefully selected. Where seepage water is encountered adequate side ditches or subdrains are provided.

By **CHARLES HOPKINS**
State Drainage Engineer

In our design we use Talbot's formula to determine the required size drainage structure.

As all road pavements depend directly on the subgrade for support our problem in drainage is to provide construction which will expedite the removal of surface and underground water, thereby keeping the road grade sufficiently above the water table to keep

the subgrade immediately below the pavement from becoming saturated. By underground water we refer to seepage water that occurs near the surface of the ground. By collecting and disposing of the seepage water encountered immediately under the pavement the subterranean water supply is affected very little, if any.

The State Road Department, in its design and construction of roads, does not try to conserve the surface water supply. Its primary

(Continued on page 41)





In the unburned forest nature establishes a balance between soil, slope and water supply.

NEXT TO SOIL itself, water is our most important natural resource. As a matter of fact, without water, soil is unproductive and lifeless—for water is one of the first requirements for all living things. Man can go for days without eating but water he must have within a few hours or he dies. Pliny, ancient Roman naturalist and philosopher, observed "Of all things, wa-

Forest cover is best guarantee of soil and water conservation. In the rolling lands like these of west Florida, active erosion moves in when the timber is removed.



MAKING

By **WILLIAM F. JACOBS**

Assistant State Forester

ter is best!" It is no exaggeration to say that water is life.

No water is ever lost or destroyed. The raindrop that falls today on a citrus grove in central Florida may have helped to float logs to the sawmills of Michigan a century ago or attended the baptism of Jesus of Nazareth.

When a raindrop falls, it may evaporate and return to the air, or it may run off the land into a stream and eventually flow to the ocean, or it may "soak" into the ground. If it soaks into the ground, it may percolate down through the soil to the water table below and be stored for future use, or it may move about in the top soil. If it remains in the top soil, it may come back to the surface and evaporate or it may be absorbed by plants and return to the air by transpiration through the plants' foliage. Any return to the air, whether by evaporation from the ground or by transpiration from the leaves of plants, is a short circuit of the water cycle. Actually, water in its liquid state is constantly seeking its lowest level, the ocean. From there, it is lifted by sun evaporation and returned to the atmosphere where it collects in the form of clouds. The bulk of it falls directly back into the ocean in the form of rain. But, if the wind blows the clouds over land, the water again is made available to land-living plants and animals.

Not all clouds are formed over the oceans. Sun evaporation captures from inland streams and lakes some of the water enroute but the greatest cloud feeder on land is our forest acreage. By transpiration, tons of water are pumped from the ground and broadcast into the air constantly. The tree is a far more efficient pump than anything mechanical that man has ever developed and trees have been known to raise water to a height of almost 500 feet. Actual tests have shown that a single tree in 24 hours has delivered 4,400 pounds of water to the atmosphere.

If man is to make the most of water, particularly where water is scarce, the rain that falls must be trapped or delayed in its cycle as long as possible. It must be made to walk instead of run. Dams or reservoirs are man-made structures to that end. Contour plowing and the development of land terraces are agricultural techniques for the same purpose. These devices are only locally effective. The control of water on any broad basis is a matter of over-all planning from the time the raindrop strikes the soil until it reaches the ocean. Such over-all control involves dams and similar structures at strategic points from the mouth of a river to its smallest tributary and, more important, attention to the condition of the soil drained by the river system.

The maintenance of forest cover has long been recognized as the primary—and cheapest—step in making running water walk. When rain falls on the forest canopy its force is broken. Instead of striking the ground

WATER WALK

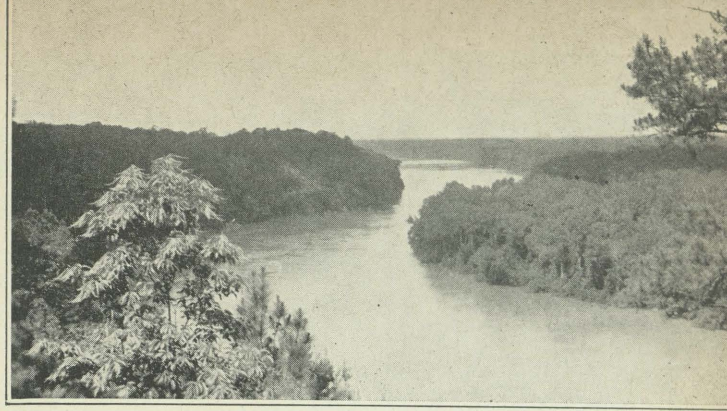
with impact, the water falls as a fine spray, drips from the leaves or branches or runs down the trunks of the trees. If the ground cover has not been burned, the forest floor has a top soil comprised of leaves, twigs, and vegetable matter in various stages of decay. The top layer, or litter, is undecomposed and by its unorganized, fibrous nature forms countless minute reservoirs which hold the water to keep it from running away.

Beneath this buffer of top litter, there is a progressively decayed layer of humus of porous nature and capable of acting much like a sponge. The thickness of these two top layers is, of course, variable but where vegetative matter has not been consumed by flames and permitted to accumulate, it is normally 3 to 10 inches to the zone where the humus disappears and the underlying mineral soil asserts itself.

While the holding or impeding action of the top litter is not to be regarded lightly, we are told that even more important is the porosity of the humus and top soil beneath the litter. Here again, the trees perform an important function for the porosity of that soil is largely determined by the nature of the vegetative material deposited by the forest canopy, the extent of root development in the top soil, and the existence of countless forms of insect life and minute organisms which assist in aerating the soil and depend upon the vegetative material for their existence.

Obviously, the nature of the soil—whether clay, loam, sand, or gravel—is a factor in this porosity. But, without the protecting layer of litter and vegetative material in stages of decay, there would be no porosity. When rain falls on bare land, the water immediately becomes muddy and as it seeps into the pores of the soil below carries with it, in suspension, fine muddy particles which seal the pores and openings in the soil, closing them to further seepage and rendering the soil nonporous. Investigation has shown that muddy water may permanently reduce the water absorption ability of the soil by 90 percent within 6 hours.

Another factor in the water retention capacity of the soil is the size of the soil particles. Each particle of soil, by a chemical action, gathers about itself a film of water and the spaces between the particles serve as reservoirs. If the particles are small, they are closely packed and the spaces between them are reduced to a minimum. Where the particles are large, they cannot pack so tightly and the cavities between them are correspondingly larger and will hold more water. In soil with a high degree of humus, the humus and mineral materials, even when the latter is of fine particles, form irregularly shaped clusters or masses which are themselves of a porous nature and which result in large soil cavities. Studies conducted at one experiment station showed that the top litter, composed of undecomposed material, holds water to the extent of 200 to 300 percent of the litter's dry weight and that the second layer, consisting of decomposed matter, holds 85 to 250 percent.



The Apalachicola River, viewed here from Alum Bluff in Liberty County, always looks muddy because it is loaded with some of the finest farm soils of Alabama and Georgia.

This water-holding ability is commonly referred to as the sponge action of the top soil.

This retained water does not remain static. During dry days, following rain, some of the water held near the soil surface evaporates and the litter "dries out." Some of the water, both in the litter and the humus, is absorbed by trees and plants and returned by transpiration to the atmosphere as vapor where it contributes to new clouds. A good portion of the excess rain caught and held yields to gravity and seeps on down through the soil to join the water table and add to man's ground water supply.

Before the settlement of Florida by the white man, nature had established a more or less perfect balance or equilibrium. Tree and plant growth suited to soil, slope, and climatic conditions existed in every local situation. Only very excessive rains produced run-off and this did no harm. The absence of run-off eliminated excessive floods. The gradual release over a period of weeks or months of surface water surpluses caught by the soil maintained reasonably good stream levels the year around. Erosion was practically nonexistent. Streams were clean and clear.

With the white man and his cropping program came the progressive clearing of forest lands, the plowing under of ground cover, the loss or "wearing-out" of the hu- (Continued on page 43)

Hillsborough River is typical of the calm, quiet streams that drain peninsular Florida.





FLORIDA'S GAME FISH

mire that was left of Lake Iamonia before the condition was changed.

In so many places where bodies of water are drying up it is impossible to seine the game fish and to remove them to safer areas. Lowering of the water supply does not do much harm to predators such as the garfish, blackfish, turtles, snakes. They can survive for a long period of time in conditions of this kind and thrive on helpless game fish which become much easier to catch under the circumstances. Insufficient water denies edible and game fish the protection intended by nature in that natural hiding places are no longer available.

Limited surface waters likewise

furnish a limited food supply to fish. This is another hazard which is in store for Florida's black bass, perch, bream, and shell crackers which must have roomy, watery areas in which to forage for the food that nature dictates they must eat. Restricted in their search by lowered waters these members of the finny family become easy prey to predators and to diseases peculiar to them. The fish taken from a shallow, filthy, polluted body of water is not in any way comparable to that caught in a clean, running stream or deep lake when it comes to a matter of taste in fish meat.

Predators seem to survive, and as a matter of fact thrive under adverse

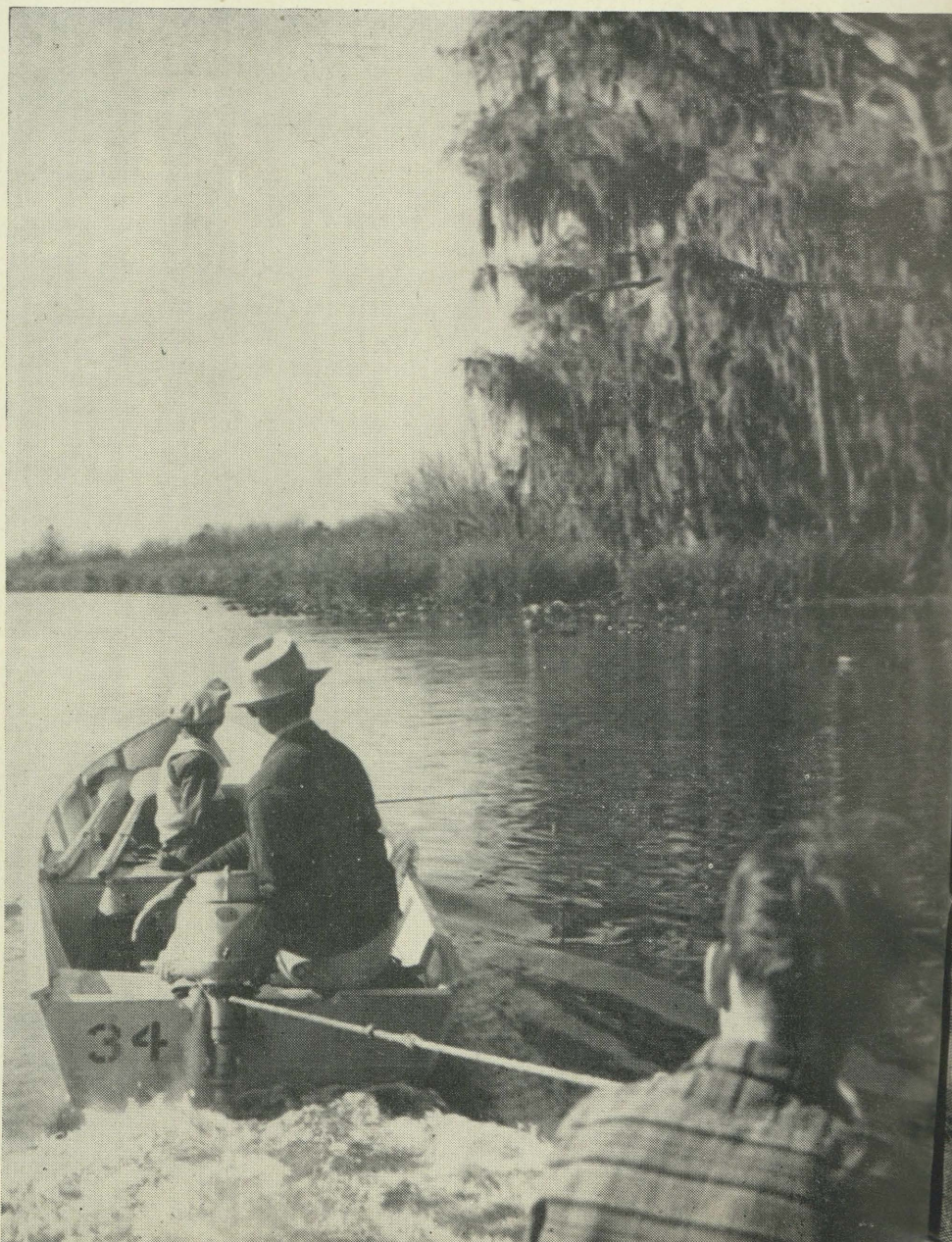
By I. N. KENNEDY

Executive Secretary
State Game and Fish Commission

NATURE, AIDED by man, is providing a new and serious threat to Florida's famed fresh water sports fishing. A dwindling water supply in the State is in the near offing which may place the fish population in certain jeopardy for its very existence in the next few years.

Already, excessive drainage, uncontrolled flowing wells, and the general lowering of the water table in Florida have caused the loss of untold thousands of fresh water fish. This is particularly true in small lakes, ponds, and other bodies of water of normally shallow depth.

The mysterious sinking and drying up of Lake Iamonia in north Leon County several years ago is a specific example of the terrible tragedy that descends on the fish tribe by the sudden disappearance of water. Man's ingenuity in this instance remedied the situation with the construction of dams and the practice of other engineering feats. But the damage was done, thousands of pounds of beautiful black bass and broad bream being left flopping to their deaths in the



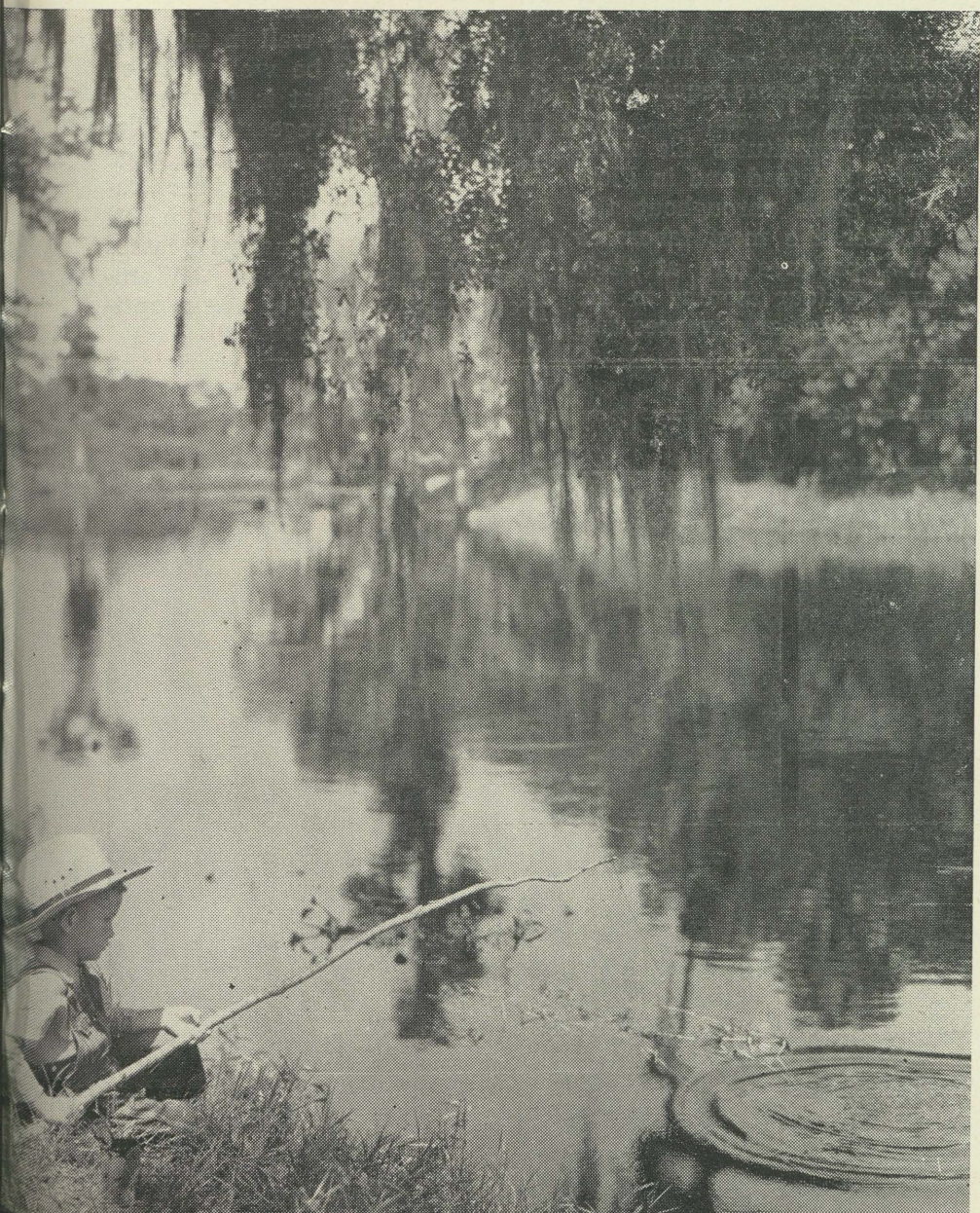
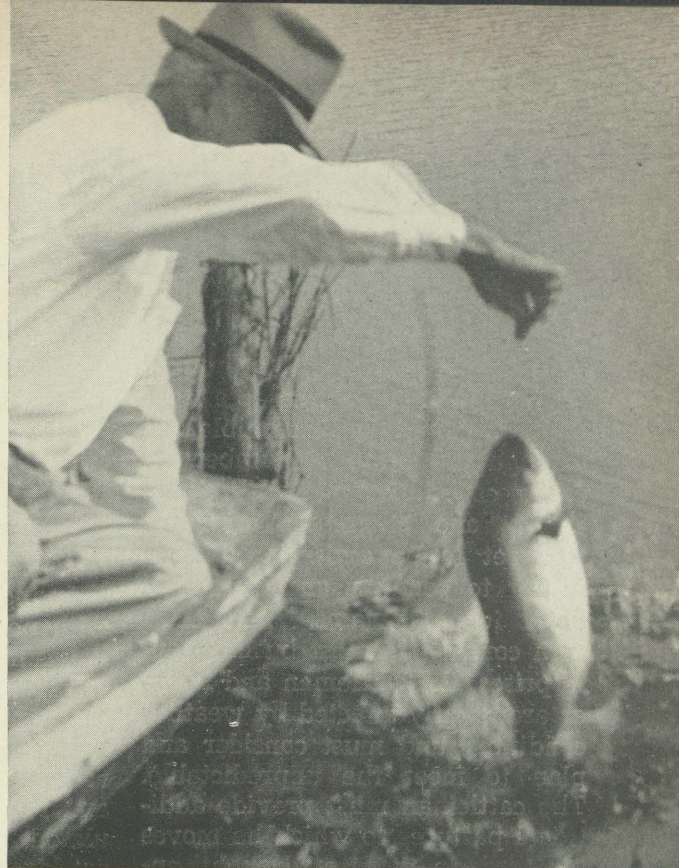
IN DANGER . . .

water conditions. They multiply to such an extent that when the water line is brought back to its normal safe height, game fish are practically unable to survive.

While water conservation steps will be taken primarily to safeguard the interests of agriculture, industry, and community life, proper protection of the water bodies in Florida will mean life for millions of pounds of the State's fish, assuring future generations of some of the sport and food supply that has been enjoyed for the past century.

Not even the poachers or illegal seiners can do more damage to this Florida natural asset than a depleted and depleting water supply.

While Florida is not an industrial State, the probability is that in the near future many more industries will find their way to this State. Pollution by waste from industrial plants, if permitted to discharge into the State's lowered streams and lakes, would further affect the fish supply adversely unless suitable control is provided. We have reached the point where we cannot longer go without adequate control of the State's water resources.



Water, Water Everywhere?

(The following article on Florida's fresh water situation was written last year by Glenn Thomas, now of the U. S. Navy, son of Lacy G. Thomas, chairman of the Florida Farm Bureau's drainage and water conservation committee and published recently in the bureau's monthly bulletin.)

While Florida is underlain by a vast reservoir of fresh water, it is a fallacy to believe that these supplies are inexhaustible.

It has been found that in some areas of Florida the water table has gone down 2½ to 3 feet in recent years.

There are several reasons for this depletion. One is needless waste of water. Many flowing wells are allowed to flow continuously, whether they serve any useful purpose or not. Others are allowed to flow on the supposition that they will become plugged if shut in. However, in no event should waste of water be permitted.

A second cause of depletion is the enormous drafts on underground water made by large and small industries. Two-thirds of our public water systems draw from the ground.

(Continued on page 43)

Water Supply and Cattle . . .

THE CHIEF HAZARD of cattle production in Florida is the failing water supply. The drought this spring in some areas has caused an immediately discernible loss through the death of numbers of cattle, especially cows with young calves, and a greater economic loss yet to be experienced from injury to pastures and failure of herds to make gains.

In contrast to most business enterprises, the cattleman and farmer are greatly affected by weather conditions and must consider and plan to meet the unpredictable. The cattleman must provide additional pastures to which he moves his herds in times of drought, entailing additional outlay of capital, his herd is disturbed by moving, with attending economic loss, to which must be added additional labor costs incurred.

The conservation of water on range areas is now recognized by the Federal government to be of national interest. Cattle must have grass and grass must have water. Everyone knows cattle can be raised in Florida but the number and margin of profit depend on the adequacy of the water supply. It has been said that 30,000

By **J. V. KNAPP**
State Veterinarian

to 60,000 pounds of water are required to produce one pound of beefsteak. The average range steer eats 80 to 100 pounds of grass daily of which 90 percent is water.

Florida is a low-lying peninsula, enjoying a subtropical climate with no extremes of temperature. It has many varieties of soil, ranging from coastal marshes through sandy pinelands to hardwood hammocks and the immense prairie valleys of the Kissimmee, St. Johns and Peace Rivers, which are populated by thousands of head of cattle.

Soil is nothing more or less than the natural medium for the growth of plants and it differs greatly according to geographical location. Climate — rainfall, sunshine, temperature, and humidity, are the several factors required for the production of grass.

Pasturage constitutes the main source of cattle feed and in Florida cattle graze throughout the year. Under the most favorable conditions, pastures are at their best three or four months in the spring. As summer advances and

the temperature rises, the maturing grass becomes less palatable and is reduced in nutritive value, and at this point frequently the effect of water depletion in the soil is felt. This has brought about the expression among cattlemen that a dry fall adds three weeks to the winter—the most critical period in livestock production.

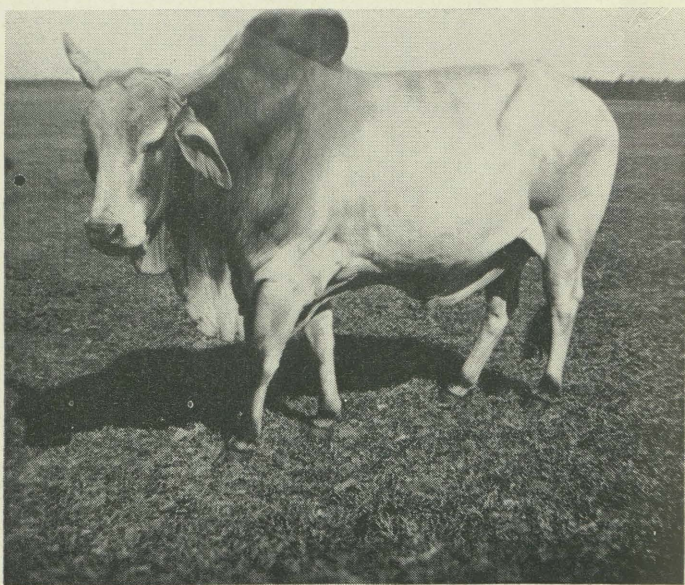
A cow can lose nearly all of her body carbohydrates and fats, fully half her body protein—in all, 40 percent of her weight and still live, but the loss of 10 percent body water causes serious disorders and 20 percent water loss will cause death.

For four centuries, since they were first introduced by the Spaniards in 1520, cattle have been produced in Florida and this is now considered a \$150,000,000.00 industry in the State.

When cattle do well in an area, they are said to be well adapted to that section—that is, to the climate and local vegetation. The quality and abundance of forage grasses produced is the direct result of climate acting through soil and in Florida the native grasses and introduced grasses of improved pastures reach their opti-

(Continued on page 41)

Live stock must have plenty of water and the grass and feed they eat cannot grow without water. Left, a purebred Guernsey cow; right, a purebred Brahma bull.



South Florida's Water Supply . . .

WATER, SOIL AND sunshine are south Florida's greatest natural resources—and conservation of the water its greatest problem. The area's water supply comes entirely from local rainfall and is influenced by both topography and soil characteristics. Not being supplemented from other sources the rainfall must be stored in the watersheds, the lakes, the sloughs, the soil, and in the undeveloped portions of the Everglades.

Importance of the storage of the rainfall will be better appreciated when it is realized that the four winter months — November through February, one-third of the year—provide but one-eighth of the rainfall; the spring season—March through May—provides a little less than its average share; and the rainy season provides more than two-thirds of the annual rainfall.

Advantages of three-fourths of the days in the winter season being practically rain free have attracted many winter visitors to both sides of the peninsula. The 60 percent balmy rain-free days during the balance of the year bring prosperity to the rest of the peninsula. But these very advantages make imperative the careful conservation of all the water resources supplied by nature. The need for this conservation is highlighted by the fact that 75 percent of the days have little or no rain, 22 percent a rainfall of less than one inch, and 3 percent a rainfall of one inch or more.

Land use in south Florida is largely dependent upon reclamation, in the course of which careful consideration must be given to conservation of both water and soil, which must give weight to both drainage and irrigation—in other words, water control, as the region is interspersed with sizable areas of peat or muck soils, the most productive in the world and, at the same time, the most easily destroyed. These valuable soils are created from decaying vegetation and are formed by sensitive

By CLARENCE R. BITTING
President, United States Sugar Corporation
Clewiston

organic substances and, unless properly protected through saturation of the ground when not in productive use, are subject to destruction through subsidence, oxidation and bacterial action, soil fires, and wind-carried dust.

Uncontrolled run-off to the sea of these valuable waters is without justification. With only 35 percent rainy days, it is important that the rainfall be conserved for use during the remaining two-thirds of the year. The best method of rainfall conservation is its storage in the lakes, sloughs, and soils of the area. Such storage will aid in providing water supplies for the drainage sheds to the north, build up hydrostatic pressures and thus protect potable water supplies for the metropolitan areas on the coasts, aid in the prevention of soil oxidation, subsidence, and burnings, aid in the amelioration of violent temperature fluctuations, provide the water necessary for plant life throughout the year, and make possible the maintenance of adequate soil water, without which

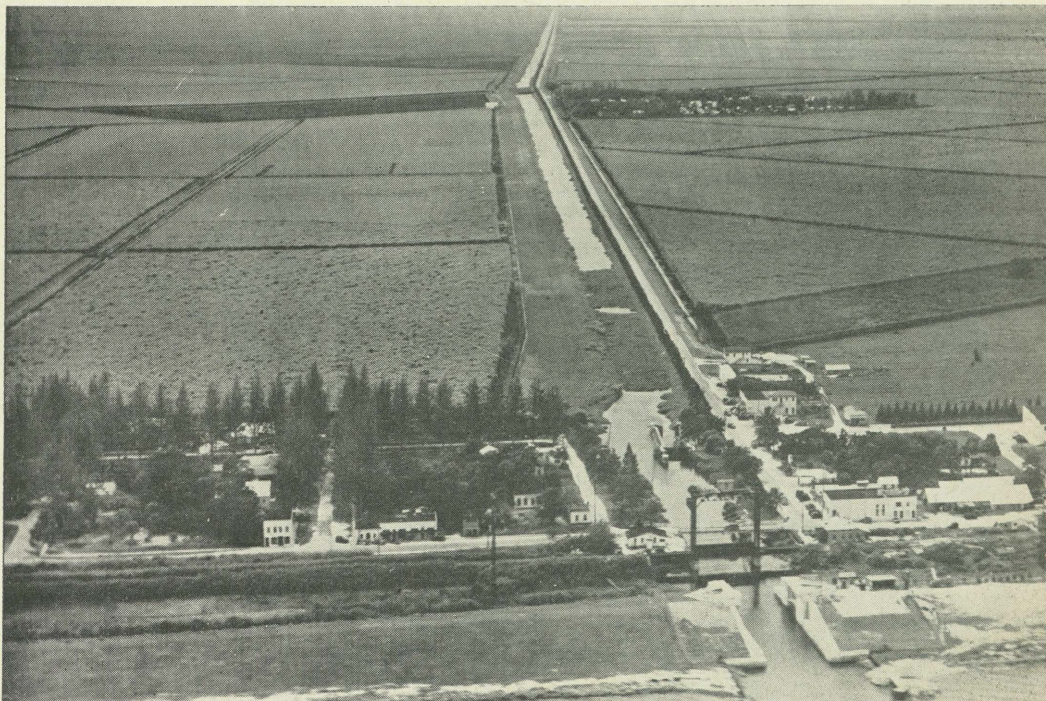
the water supply of south Florida will be wholly inadequate.

Water supply and adequate provision of such water supply for south Florida is highly technical and requires careful consideration of all factors involved, as it is imperative that the water resources of the region be meticulously conserved. Such requirements make necessary impartial study and long range consideration of all factors in order to provide the necessary water for domestic and sanitary uses, agricultural and industrial uses, and the conservation of the soil.

South Florida's greatest resources are its soil and its climate—both may be destroyed if the water resources of the area are not conserved. Almost daily the press records the rumblings of future disaster. The problem is so important that it deserves the study and opinion of the best impartial and reputable authorities. Delay is costly and anything less than the best impartial advice may prove disastrous.

Howard Smith of Madison County won first prize of a \$50 war bond for the best all around project in the State 4-H club boy's contest. He produced 768 bushels of corn on 35 acres.

Aerial view of Canal Point, showing the Azucar Plantation village of United States Sugar Corporation in background.





The Basin of Lake Iamonia, Dec. 18, 1933

AMONG THE many attractions Florida has to offer, is the great number of lakes dotting the landscape. They vary in size from the majestic Lake Okeechobee to the small ponds and still smaller water-filled sinkholes of the limestone regions. With the single exception of Lake Michigan, Okeechobee is the largest fresh-water lake entirely within the United States. While Okeechobee with an area of 730 square miles, at a water stage of 20 feet above the Gulf, easily maintains first place in size in the State, Florida has numbers of other rather large lakes found especially in the ridge section or lake region of the Peninsula. Among these are Lakes Kissimmee, George, Istokpoga, Tohopekeliga, Apopka, Harris, Eustis, Griffin, Jessup, Monroe, Weir and others too numerous to mention. There is, furthermore, a great variation in depth, many of the larger lakes being comparatively shallow while the smaller often are deep. The lakes of the State are as variable in origin and development, too, as in other characteristics.

The recent disappearance of Lake Iamonia in Leon County, northern Florida, in a manner not generally well understood, has created much interest in the disappearing type of lake, which is indeed peculiar in character and in manner of development. There are lakes of a similar type not only in Leon County but other north Florida counties as well as in peninsular Florida where Alachua Lake or Payne's Prairie is the well known example. Under normal conditions these lakes are filled with clear water, usually relatively shallow, except in certain restricted or rather confined portions, of considerable areal extent and abounding in fish of various kinds as well as a favorite haunt of the duck. These lakes upon disappearing in most instances refill slowly, depending upon rainfall. Some, however, have remained practically dry for numbers of years. To understand the peculiar behavior and the origin of these lakes and the basins they occupy it is necessary to give thought to the geologic formations underlying them.

FLORIDA'S

By HERMAN GUNTER

Geological Division
State Conservation Department

These temporary or disappearing lakes occur in the upland section of the State where the topography is rolling or hilly. They owe their origin to both mechanical erosion and erosion by solution, the latter performing a major role in their development. Underlying the regions in which these lakes occur are limestones sufficiently close to the surface to permit the ready entrance of ground

water. It is the solvent effect of the circulating ground water that results in the development of passageways or solution channels in the limestone and finally in the formation of sinkholes. Solution is a most important result of circulating ground water. Rain water while passing through the air takes into solution a certain amount of carbon dioxide. In addition organic and mineral acids are absorbed by the water while passing through the soil. As these waters descend into the earth the increased pressure permits greater quantities of these gases, acids and salts to be held in solution, all of which increases the dissolving power or action. Thus through periods of time these more or less acidulated waters slowly and gradually act upon the subsurface limestones to such extent that finally being no longer able to support the weight of overlying soil materials the roof breaks through and the typical sinkhole is formed. This action long continued results in the progressive lowering of the region and ultimately in the formation of a basin or lake of which Lake Iamonia basin is a typical example.

Many of the basins of these periodic lakes have been lowered to very near the permanent ground water level of the region, and have therefore reached practically base level. Thus the sinks through which the waters at times disappear always retain some water, some having a wider areal extent than others. Likewise the areas surrounding these sinks are more or less cavernous with perhaps developed channels for a greater or less distance in the subsurface limestone. Thus the small area of surface water and the subsurface solution channels afford a harboring place for a number of the fish and other aquatic life until such time as the lake refills through rainfall.

When lakes of this character disappear they are usually reported as running out very rapidly. Ordinarily, however, this is not the case, for the lowering is gradual and progressive unless interrupted by rains. If new sinks form, which does happen, the rate of escape of the water may be, of course, greatly

Disappearing Lakes . . .

increased. These lakes as a rule run out following prolonged periods of dry weather. The present instance is no exception. According to rainfall statistics of the U. S. Weather Bureau, Tallahassee station, there had been a deficiency of rainfall in this section for about two years. Necessarily this deficiency seriously affects the ground water level but so long as the lake has sufficient water to cover a large portion of the basin the lowering apparently proceeds very slowly, then as the water area becomes more restricted the lowering appears to proceed more rapidly. This leads to the statement that the lake escaped very rapidly, while as a matter of fact the water may have actually escaped no faster during the dry season than it had been during the season of normal rainfall, unless as above suggested new sinks had formed or the old ones had become freed of debris and unclogged thus making them more active than normal. Lake Iamonia had been lowering for some time and very perceptibly so for about three weeks previous to its actually going dry which occurred November 8, 1934. This lake does not disappear as frequently as some others in this same region. However, it disappeared in 1910 and also in 1917. With the return of normal rainfall it is expected that the basin will again refill.

Lake Iamonia when normal offers to the sportsman unexcelled fishing and hunting. It is thus an economic asset which coupled with its natural beauty makes it most desirable to preserve and prevent, if possible, a recurrence of its periodic disappearance. The problem was finally solved effectively by construction of a dam which would keep the water from entering the "sink" area. The lake is irregular in outline and nature has itself made just such a plan apparently most feasible for Lake Iamonia. The development of the lake basin has been from the westward progressively eastward, thus the east end of the basin is now passing through the stage which the western portion has already passed. This being true if an earthen dam was constructed



Large lime sink of Lake Jackson which opened July 9 and 10, 1932, draining a large portion of Lake Jackson almost completely dry.

near the eastern extremity in the vicinity of the "basin" in order to retard most effectively the entrance of water from a large area of the lake basin proper into the at present most active solution area. There is, to be sure, no assurance that sinks would not in time form in the area of the lake so dammed but this is indeterminate and the potential value of such a conservation measure outweighed such a contingency.

The Basin of Lake Iamonia, Nov. 11, 1934



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County Activities and Personalities . . .

DADE COUNTY Commissioner Preston B. Bird has reported that park managers will no longer compete with farmers in the hiring of scarce local labor. He has consulted with the county park management after hearing rumors that park operations were consuming most of the local labor available.

■ J. P. Bush, chairman of the Holmes County commission, has announced a new plan for maintenance of the roads in that county. It is his hope that the roads and bridges can be turned over to the State Road Department to be maintained with State machinery, labor, and supervision.

■ The Lake City canning center, a joint project of the Columbia County commissioners, county school board, and the city council is now in operation. On its first day, 135 cans of beef for home family consumption were put up. The facility is available for use of the people in Columbia County.

■ County Agent E. N. Stephens, and members of the board of county commissioners of Jefferson County presented a program at a recent meeting of the Monticello Kiwanis Club, giving a report on the 1944-45 agricultural production for that county.

■ The Pinellas County commissioners have voted to provide bonds for expenses to obtain the right-of-way for the Gulf Coast Highway in Pasco County on into Pinellas County. Pasco County is to pay one-half of the expense when funds are available.

■ Orange County commissioners were told at a special meeting that more than 2,000 acres of Orange County land are endangered as the result of a condemnation suit brought by the Brevard County commission. County Attorney Smith explained that the 1844 law established the boundaries as "the thread of the St. Johns river." Since that time, hyacinths and the action of flood waters have choked the river and a new branch has been formed west of the original stream. The controversy has ex-

isted for years as to whether the boundaries set forth should be considered the east or the west stream.

■ Bradford County has purchased a bulldozer attachment to augment its road-working equipment.

■ J. F. Peacock has been placed in charge of the identification bureau, established in the office of Sheriff Todd Tucker. The Pinellas County commissioners provided the funds for these facilities in the sheriff's office.

■ Orange County commissioners have been advised of the need of a summer clinic for underprivileged children. Dr. J. H. Childs, county physician, has urged the board to take some action as quickly as possible.

■ Miami city commissioners were planning to transfer 180,000 acres of land southwest of Miami for an airport site.

■ J. W. Allen, division engineer of the State Road Department has advised Highlands County commissioners that he will recommend that the State assist the county in making passable the road which serves the truck farmers of Istokpoga lake section.

■ Two members of the Palm Beach County commissioners, Lake Lytal and Paul Rardin, reported to the board the approval of road work in or around that county totaling \$1,500,000 for 1945. A great part of the county budget will be expended in the Glades area on farm-to-market roadways.

■ Upon recommendation of the Jackson County board of commissioners, the Game and Fresh Water Fish Commission has closed the waters of Jackson County to the taking of fresh water fish for the period from March 14 to midnight May 14. Jackson County sportsmen have persistently sought this closed season for many years.

■ The Hardee County board of commissioners has voted to turn the old convict camp into a welfare home. Commissioner Lee Hanchey has been authorized to

proceed with furnishing a residence building for that purpose.

■ The Palm Beach County commission has been advised of the availability of a piece of property adjoining the county courthouse, which is needed in efforts to acquire the whole block on which the courthouse is now situated.

■ Hillsborough County commission has instructed its attorney, John Allison, to prepare a general bill requiring the State Internal Improvement Board to convey to the 67 counties, without charge, all lands acquired by the State board upon the expiration of the Murphy Act and still unsold.

■ Reports are being awaited on two laboratories of the Hillsborough County commission before proceeding with plans to enjoin a citrus products manufacturer from dumping refuse into county ditches.

■ Pinellas board of county commissioners has given legal notice that it proposes to seek legislative authority to regulate power rates and if deemed necessary, purchase the properties of the private company or itself engage in the manufacture of electricity.

■ Dade County must supply \$11,307,380 in order to obtain a \$6,000,000 Federal grant for the development of Virginia Key airport-seaport, the county commissioners have been advised.

■ Two attorneys, L. A. Grayson, and Morris E. White, who represented Hillsborough County in contesting V. H. Osborne's suit for collection on boom-time paving certificates will get a fee of \$5,000, and possibly \$10,000 for their services.

■ Surplus money from tax delinquent land sales in Orange County may augment post-war building funds if the county commission follows the recommendation recently placed before it.

■ Broward County commission is seeking legislative authority to establish a fund for the maintenance

(Continued on page 44)

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IT HAPPENED IN FLORIDA . . .

TWO YOUNG MEN were caught fishing with all the customary rod, line, and hook, over a West Palm Beach drug store transom. They had caught three Easter bunnies before police arrived and interrupted their party.

★ A missing pair of pants led to a court judgment of \$250 at Miami. The owner of the pants sent them to the cleaners. When they did not come back he sent the coat along too to permit identification of the pants. When he received neither he visited the cleaning plant. The proprietor engaged in an argument with him over the pants and eventually threw him out. The pants are still missing but the owner has a judgment for his damaged feelings.

★ Another Miamian got into hot water over hot water. Installing a water heater, he neglected to install a check valve and as a consequence his hot water backed up into the mains and supplied his neighbors. The neighbors might have accepted the free service gratefully except that hot water came from their cold water spigots and hot water is not useful for such purposes as watering lawns and drinking. In the ensuing investigation he was charged with four counts of unauthorized plumbing and electrical installation, was fined \$25 on each count.

★ A St. Petersburg negro left dinner cooking on the stove on his little balcony porch. When he returned a few minutes later he was surprised to find that the dinner, the stove, and the porch were missing. A passing truck side-swiped the house, removed the whole thing.

★ A Miamian bought a house, moved in, found 27 sticks of dynamite under a floor, removed it gingerly and buried it.

★ Reading that 20,000 tons of tomatoes had been dumped at Dania because of labor shortage in the

canning factories, Coral Gables clubwomen agreed to pitch in and help save this food as a wartime service. Thirty clubwomen volunteered immediately and Mrs. Fred Gringham, president of the Garden Club and Mrs. William T. Hilles, president of the Woman's Club, had a goal of recruiting 50 more.

★ A Hollywood woman, took a wrong turn, drove her car onto a roadway leading to an abandoned rock pit, saw her predicament but stepped on the accelerator instead of the brake. Her car roared down a 30-foot incline into the pit. Thrown clear, she found her way afoot back to the highway where she was found unconscious.

★ At Orlando the chocolate tree on the courthouse grounds is blooming. The bud looks like a banana and blossoms when the peeling-like petals curl back leaving in the center what looks like a miniature stalk of celery.

★ A seaman stationed near Ft. Pierce expressed a desire for one more taste of Mom's pecan pie before going overseas. Back in Arkansas Mom pondered the problem of sending anything so fragile as pecan pie by mail, solved the difficulty through cooperation between the Phillips County, Arkansas, and St. Lucie County, Florida, Chapters of the Red Cross. Mom sent all the ingredients to Ft. Pierce, together with complete instructions. The Ft. Pierce Red Cross found a woman not unfamiliar with pecan pie Arkansas style to put them together. The result—one smiling GI on his way overseas.

★ Tallahassee's post office did a landoffice business in first day covers bearing Florida's centennial stamp. Scores of thousands of such covers were received, cancelled, and mailed for collectors.

★ Carl Brett, 11, of Mango near Tampa, was promised an airplane ride on his eighth birthday but his

parents could not deliver because of wartime restrictions. Carl is now learning to fly but is impatient because regulations prevent him from piloting a plane solo until he is 16.

★ A 17-year-old St. Petersburg girl is held on a charge of slaying her father. The defense says that she took her father's life to protect her mother whom he had beaten twice that day.

★ In Tampa one woman arrested for drunkenness kicked a traffic policeman in the face and a patrolman in the stomach, broke out the window of the patrol car . . . another asked police to lock her up until she could straighten out because she had been drunk for two weeks and monkeys were chasing her.

★ A well-dressed man rode a horse up Franklin street in Tampa, dismounted, tied his horse to a parking meter, deposited a nickel in same and walked off.

★ Jacksonville school children and zoo authorities are rejoicing because Lloyds of London has insured the life of Miss Chick, pampered female elephant bought with children's pennies. No American firm would insure Miss Chick because of a wave of disasters recently to elephants in circuses and zoos. Lloyds wrote a \$3,000 policy on her.

★ A Sanford woman, working on the hinge of her back screen door paid no attention to a persistent noise nearby or to her yellow cat which kept striking at something under the house. When she straightened up there was a big rattlesnake about 18 inches from her foot and half under the house. The crack was too small for the snake to coil and the cat's sparring had kept it from coming out.

★ A Jacksonville hen, probably to aid the war effort, laid an egg inside an egg, each complete with shell.

★ A Ft. Myers bullfrog was sent by air to Albert Lee, Minn., to help Miss Louise Wulff complete her thesis study in biology.

★ A Pinellas Park nanny goat had triplets. Last year she had

(Continued on page 40)

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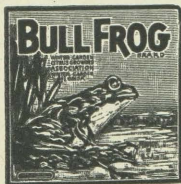
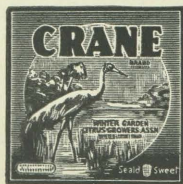
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FLORIDA

Trucking Association News . . .

OPA—FLORIDA

We are advised by our national headquarters ATA, that a rather extensive investigation will be conducted relating to manner in which tires are being allocated in our State.

Our office has transmitted to ATA various complaints registered with our office with the request that they use their best efforts to alleviate this situation.

We don't know what the answer to this problem is because OPA just don't have enough tires to supply all critical users but some members are of the opinion that a more equitable distribution system could be employed. If you have any ideas, comments or suggestions in this connection send them along to us. In our contacts with OPA officials they appear to be very cooperative and it may be that if your suggestion is a good one they will give it a try.

MEET THE NEW MEMBERS

We present the following new members to our entire membership. Meet—

Mr. W. H. Clark, president, W. H. Clark Fruit Company, Jacksonville.

Mr. H. C. Kirk, Gulf States Lubri Gas Company, Ft. Lauderdale.

Mr. W. A. Patrick, Niblack, Patrick & Lingle, Sanford.

Mr. C. D. Walker, Walker Fertilizer Company, Orlando.

Mr. W. M. Puckett, Watt's Baking Co., Tampa.

Mr. Leon Sheldon, Winter Haven Citrus Growers Ass'n, Winter Haven.

Mr. R. J. Gould, R. J. Gould Welding Co., Tampa.

Mr. Joe Rosenthal, Rosenthal Fruit and Produce Co., Miami Beach.

Mr. R. W. Apte, Apte Brothers, Tampa.

Mr. N. R. Farrar, Bell Bakeries, Inc., St. Petersburg.

Mr. Alva Miller, Plant City.

Goodyear Service Stores, Tampa.

Mr. Earl Almas, Miami.

Mr. J. M. Gillseppe, City Transfer & Storage, Jacksonville.

South Florida Motor Co., Sebring.

All you fellow-members who are located in the same vicinity with these new members drop in and pay them a personal visit—"let's really get acquainted." And to you new members WE EXTEND YOU A HEARTY WELCOME into our Association.

We are proud to announce that Miller Trailers, Inc., Bradenton, one of our active members has been awarded the Army-Navy "E" Production Award.

TENNESSEE NEW TRUCK SIZE & WEIGHT LAW

Governor Jim N. McCord of Tennessee has signed into law the new truck

and length law (Public Act No. 132) and the new truck weight law (Public Act No. 164) both of which are now in effect.

In brief the provisions of these laws are as follows:

Length Law:

Maximum length, single vehicles, 35 feet.

Maximum length, tractor-trailer, 45 feet.

Maximum height, 12½ feet.

Weight Law:

Gross weight shall not exceed the total of 700 times the (distance between first and last axles plus 40) but shall not be in excess of 42,000 lbs, with the following schedule of license fees.

Private carriers—30,000 to 36,000 lbs. \$250.00; 36,000 to 42,000 lbs. \$275.00.

For hire carriers—30,000 to 36,000 lbs. \$375.00; 36,000 to 42,000 lbs. \$400.00.

In view of these new laws it will no longer be necessary to obtain permits for truck operations not in excess of 42,000 pounds. However, license must be purchased to cover the gross weight

in accordance with the above schedule.

1945 license tags went on sale March 1st. The Department of Finance and Taxation has advised us that the new Class 6 and Class 7 tags were available in most sections of the State by Tuesday, March 6.

DEFERRED MAINTENANCE

A measure, S. 21, to amend the Internal Revenue Code by providing a deferred maintenance reserve account for carriers was introduced by Senator McCarren on January 6. A great deal of consideration was given to deferred maintenance in late 1943 and early 1944, and ATA twice testified before congressional committees urging the inclusion of a deferred maintenance reserve in the revenue bill being consid-

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ered at that time. Rather careful subsequent surveys indicated, however, that there is a very little deferred maintenance, as such, in this industry and the extent to which we would benefit by the passage of such a measure is problematical. Senator McCarran introduced an amendment last year, largely at our suggestion but it was not passed by either house.

MINIMUM WAGES

H. R. 1172, Holifield, reads in part as follows: "That it is the sense of the Congress that a straight-time hourly rate of 65c per hour is the minimum below which the National War Labor Board shall consider any wage rate standard." This is practically identical with S. Con. Res. 48, introduced last year by Senator Pepper and on which hearings were held last fall. We testified against its passage.

The measure was considered late in the session and no action was taken. Employers should realize that there is strong support for a measure of this kind, and even to include it or something higher as a permanent wage floor on employment in interstate commerce.

FEDERAL TRANSPORTATION AUTHORITY

In early January, Senator Hill introduced S. 82 which would provide, among other things, the following: (1) Mandatory joint through routes by rail, water and motor; (2) a Federal Transportation Authority; (3) a Public Transportation Counsel; (4) a National Advisory Committee. This bill is similar to ideas proposed by the late Board of Investigation and Research and, if seriously considered by the senate committee will likely provoke protracted hearings, for and against.

OVER-THE-ROAD DRIVERS ARE ESSENTIAL

The War Manpower Commission has given "over-the-road trucking" critical status in its revised list of essential activities prepared for selective service.

SOMETHING NEW IN SYNTHETIC TIRES

Elastic plastic tires presenting resistance to the sun's rays are under experimentation. A new material is said to be the first elastic plastic capable of being vulcanized during molding operations and can be handled in hot molds like natural rubber.

OCCUPATIONAL DEFERMENTS FOR MEN UNDER 30

The Office of Defense Transportation has presented to Selective Service recommendation for a higher quota of deferments for transportation industry employees, including employees of motor carriers.

Selective Service has approved new

formula for employees of railroads, air lines and waterways, but is asking additional information in regard to employees of motor carriers.

The reason Selective Service asked ODT to supply additional information in regard to our employees is due to the absence of reasonable definite approximations. This information is being gathered by ODT District offices but ODT asserts that carriers have not co-operated with the district offices in furnishing the information.

If you are seeking deferments of men in this class and if you have not already done so, you should immediately contact your ODT District Office, Division of Motor Transport, Drawer 1740, Jacksonville, giving them complete information, and supporting the same with completed Form 42-A Special Revised.

RECIPROCITY BULLETIN

In order that our membership may be fully advised as to its existing reciprocal agreements entered into between Florida and certain other States we outline below detailed information supplied by the Florida Railroad Commission. This tabulation as of January 1, 1945.

Alabama—Full reciprocity.

Colorado—Full reciprocity.

Connecticut—Reciprocity on used uncrated HH Goods.

Delaware—Full reciprocity.

District of Columbia—Full reciprocity.

\$25.00 for stickers, common carriers, Georgia—Full reciprocity HH goods irregular route carriers.

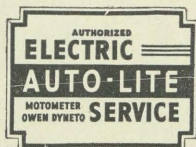
Idaho—Full reciprocity.

Illinois—Full reciprocity.

Indiana—Full reciprocity.

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Iowa—Reciprocity on used uncrated HH goods.

Louisiana—Full reciprocity.

Maryland—Full reciprocity.

Maine—Full reciprocity. No charge for stickers.

Massachusetts—Full reciprocity.

Michigan—Full reciprocity but Florida operators required to pay \$10.00 filing fee. Plate per unit \$1.00—renewal \$5.00 per year. Florida requires same compliance.

Nebraska—Full reciprocity.

Nevada—Full reciprocity. Florida trucks must register within 5 days after entry into State. Florida requires same compliance.

New Hampshire—Reciprocity on used uncrated HH goods.

New Jersey—Full reciprocity with the exception mileage tax on buses.

New York—Full reciprocity.

North Carolina—Full reciprocity.

North Dakota—Reciprocity on used uncrated HH goods.

Ohio—Full reciprocity.

Pennsylvania—Full reciprocity.

South Carolina—Full reciprocity.

Tennessee—Full reciprocity.

Texas—Reciprocity 2 trips per month not to exceed 4 days to trip.

Utah—Reciprocity carrier required to request temporary permit prior to entry of state.

Vermont—Reciprocity on used uncrated HH goods.

Virginia—Full reciprocity.

Washington—Full reciprocity.

Wisconsin—Full reciprocity.

West Virginia—Full reciprocity. Florida operator must obtain cards and plates for each vehicle cost \$1.00 per \$1.00.

It is the present requirement that all reciprocal motor carriers prior to operating in Florida must:

Make application for registration under the reciprocal agreement on forms furnished by FRR commission.

File a certificate of insurance, on the commission's prescribed form.

Make application on forms furnished by the commission for identification stickers.

All reciprocal carriers are required to make application to FRR commission on the prescribed form and attaching thereto evidence by certified copy or permit or certificate issued by the Interstate Commerce Commission together with all amendments thereto and transfers thereof showing authority for operation into the State of Florida.

All carriers are required to have identification stickers on each vehicle operated into the State of Florida, as evidence of proper registration, and failure to apply for and secure identification stickers will subject the carrier to criminal prosecution under the police powers and regulations of the railroad commission of the State of Florida.

Prescribed forms referred to above will be furnished free of charge on request by the Florida Railroad Commission.

SEE IF SHE CARES

A St. Petersburg woman who figured the relatives might be worried about her because of the Florida hurricane (forgetting it is now a Northern phenomenon also) sent a wire to the key person in her picture, but, lest she alarm her, in care of another woman . . . The eventual acknowledgment ran about like this: "What's the big idea of sending a telegram to R—to tell me you are all right? I know you did it because you thought if it came to me I'd worry before I had it open. But I foxed you that time, as I was in the hospital and was worrying about myself and never gave you a thought with your old hurricane. Anyhow it takes a hurricane to make you think of me and that's something. Guess I didn't tell you that R—married the third man, who was deaf as a doorknob, and she buried him in July. Her name is W—now and she got a 21-acre farm out of him up in Maine and is now looking for the fourth . . . Here's to bigger and better hurricanes. Humph! Both of them did a lot of damage here."

There will be very little shaving cream, tooth paste or cosmetics packaged in collapsible metal tubes for civilians in 1945, E. Allen Newcomb, secretary of the National Wholesale Druggists' Association announced. Shortage of lead used in their composition is the reason.

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INTER-AMERICAN PLANS OF STATE CHAMBER OF COMMERCE

The first step in carrying out plans of the Inter-American division of the Florida State Chamber of Commerce for establishing centers for promoting trade and cultural relations with Latin American countries was taken in submitting the proposal to the board of directors for approval.

Among noted authorities on Inter-American affairs who assisted in formulating plans was Charles Morrow Wilson, foreign correspondent, editor and author. Mr. Wilson stated that "Florida, through tradition and history has an opportunity to march in step with Latin America. By her advantageous geographical location she has the brightest hope of any State in the Union in the field of Latin American trade but action must be taken now. I heartily approve the work of the State chamber in its Inter-American program for in working toward harmonious economic relations the spirit of business men is important. If we fail now, the future of our Nation is lost."

The Honorable Herschel Brickell of the State Department acting in an advisory capacity especially approved of the State chamber's endorsement of the eastern arm of the Pan American Highway and of plans for visiting Latin American consuls. "With the approaching end of war buying," Mr. Brickell said, "Inter-American affairs are fast approaching a crisis."

In brief the division's plan consists of the recommendation of the establishment of a Florida Inter-American Center which will act as a regional clearinghouse, service bureau and source of information for individuals and organizations who can contribute to Inter-American understanding and cooperation. It proposes a paid executive director, with secretarial assistance, whose principal duty will be to serve associated centers to be located in cities which express desire and need for such an organization. Further, the following commissions are provided to carry on the work of the center: Commission on education, publicity, cultural relations, travel and economic development.

The plan is adjusted to cooperate with all existing agencies now working the Latin American field.

Among the millions of American mothers who anxiously watch the news from battlefronts is Mrs. Christina Hamilton of Monticello, who now has six sons in service and at one time had seven. One son was recently released on a medical discharge because of a broken back.

A man swears he found a grocery store where this sign was displayed: "Ladies will please not bring in their fat cans on Saturdays."

Among the newest recruits for the U. S. armed forces are junior's talcum powder can and mother's paprika can, which have been adapted to form the double shell of a hand-held distress signal. More than 1,500,000 of the hand-held flares have been ordered by the government, according to R. C. Taylor, vice president of the American Can Company, which developed the item. A flyer forced into the wa-

ter can release a colored smoke signal by pulling a ring in the top of the container.

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Police of Nation Have Opened War on Bad Brakes

April 15 the police of the United States and Canada opened their special program aimed at saving passenger cars and saving lives and limbs by means of a unique check to be given cars involved in moving traffic violations and in accidents.

"Need for such an unprecedented program should be clear to all motorists and toll pedestrians," asserted Brigadier General D. C. Draper, president of the International Association of Chiefs of Police, sponsors of the six-week program.

"Evidence indicates that 10 percent of the passenger cars in the United States and Canada have brakes which range from unsafe to plain dangerous," General Draper said.

The keystone of the police program is a small wooden block one inch thick which police officers will use in checking brakes. Officers will place the block on the floorboard under the foot pedal. The pedal is gently depressed. If it strikes the block before the brakes begin to grip, the officer will know immediately that the brakes are probably unsafe.

Motorists will be warned or required to have inspections and repairs made in accordance with local enforcement procedures.

"This Nation-wide police program is a war emergency effort to conserve cars and to prevent traffic accidents which are hindering the war effort to an unbelievable degree," General Draper added.

Every two minutes a passenger car heads for the scrap pile because it was damaged beyond repair in a traffic accident. Every 24 hours 65 people lose their lives and 2,330 more are injured. "War or no war, those are economic and human losses we can ill afford," General Draper declared.

Since in many accidents car damage is such that brake conditions cannot be ascertained, there are no figures which show accurately how bad brakes contribute to accidents, police point out. However, records in a dozen States show that up to 11 percent of the accidents are caused by brakes that couldn't stop cars in time. Moreover, brakes, good or bad, are employed in nearly all emergencies.

Some 5,000 police chiefs in the United States and the nine provinces of Canada, heading tens of thousands of officers, are conducting the program which will terminate June 1.

Police manpower shortages will not permit giving the check to all cars, consequently the public is urged to cooperate by having their servicemen inspect their brakes and make needed repairs. A similar brake-check program, with good public support, in one State last year reduced the ratio of cars with bad brakes from one in seven cars to one in 23.

The police program, although centering around the brake-check, will cover all things having to do with car safety. Motorists will be urged by the police to keep their cars in safe running condition as well as safe stopping condition.

Through the cooperation of the War Production Board and the Office of Defense Transportation, it is believed the supply of repair parts and brake fluid will be ample. The program is supported by 100 national groups concerned with highway safety, by President Truman and General Brehon B. Somervell, Chief of the Army Service Forces.

Few people realize it, but cancer kills 60 percent more people today than all contagious and infectious diseases combined.

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Action—Not Funds Needed In Post-War Highway Planning

With upwards of \$160,000,000 available for highway engineering surveys and planning preparation there can be no excuse for any State, county or city not having a shelf of post-war construction projects ready to move when V-day comes, Charles M. Upham, engineer-director of the American Road Builders' Association declared in an address in Washington. He pointed out that \$100,000,000 was authorized by the Federal-Aid Highway Act of 1944 passed last December, and the balance from the Defense Highway act of 1941 and the Federal Highway Act of 1943. Much of the earlier authorizations is still available.

"In order that the 3 billion dollar post-war highway program may do what it is designed to do—rehabilitate our highway system, furnish millions of jobs and stimulate our national economy, we must have plans at the stage where bids can be advertised for at once," Mr. Upham declared. He urged immediate action by States and their political subdivisions so that actual work might start when the men of the armed services get home.

"This is one instance where financing is not holding up the job," said Mr. Upham. "Freight provided the necessary funds to cover preliminary planning details and the funds are available to the States. That leaves manpower as the only possible reason. "Some States, with manpower shortages in their highway departments, have successfully used women in the field, at the drafting board and in other technical capacities. Still other States retained individual engineering firms to do the job. College students too have been used effectively, the students receiving credits in their engineering courses and compensation as well. One highway department reported that working, designing, and drafting personnel were permitted overtime which meant more plans and more pay. Then too, there are returning servicemen. Even manpower shortages can be overcome," he pointed out.

Mr. Upham cited the fact that it requires twice as long to prepare to build a road as it actually does to build it, and stressed the importance of the planning phase in the over-all program. "Any State can tell you how many thousand miles of roads and streets it requires and what it will cost. But the proof of its plan-

ning lies in how much of it is on paper," he said.

"Framers of the Federal-Aid Act recognized the necessity for important preliminary steps and made adequate provision for financing them," the American Road Builders' head continued. "Each State knew four months ago what its apportionment would be and certainly its highway needs were obvious long before that. Consequently there can be no valid excuse for delaying planning."

Mr. Upham held that failure to be ready to start work at the cessation of hostilities might bring back the wasteful and ineffectual type of employment known during the depression, day labor and forced account construction. "Every minute lost at the transit or the drawing board may mean days of misery and unemployment to some returned soldier or sailor who needs a job," he said.

Due to the efforts of Dick Pope, Maestro of Cypress Gardens, Florida's nonprofessional glamour girls are crashing the Nation's magazines and rotogravure sections in keen competition with the best that Hollywood has to offer.

Florida's sugar industry received valuable publicity last month through illustrated feature stories in the Atlantic Coast Line News, official organ of the A. C. L. railroad and the magazine, Scenic South, published by the Standard Oil Company of Kentucky. Both publications are widely circulated in the territory these companies serve.

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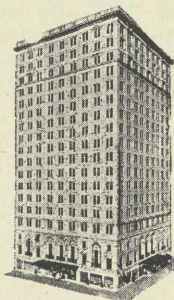
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Lyons Heads Conservation Division State C. of C.

Ernest F. Lyons of Stuart, has accepted the chairmanship of the conservation division of the Florida State Chamber of Commerce, Walter C. Sherman, president of the organization announced.

Former Governor Spessard L. Holland, was appointed honorary chairman, and Erl Roman, Miami, was named vice chairman.

Accepting the appointment as chairman, Lyons expressed deep interest in a program of conservation of all the natural resources of Florida, particularly game, fresh, and salt water fishing. He believes one of the most important conservation measures vital at this time to be a study of the hazards of water pollution, and a program for the prevention and abatement of the pollution hazard to Florida's rivers, lakes, and coastal waters.

His experience as managing editor of the Stuart News, publicity director of Martin County Chamber of Commerce, a current vice president of the Florida Wildlife League, president of Stuart Sailfish Club, publicity director of Martin County Rod and Gun Club, member of Outdoor Writers of America, and compiler of Stuart Fishing Guide of which 220,000 copies were published for distribution prior to 1941, gives him a splendid background for leadership in the conservation field.

Other members named by President Sherman are L. C. Leedy, Orlando; Mrs. A. B. Whitman, Orlando; J. Alligood McCloskey, Lake City; Frank E. Welles, Pensacola; George M. Emmanuel, Tarpon Springs; Joe M. Carr, Monticello; George S. Van Wickle, Miami Beach; N. Ray Carroll, Kissimmee; Ellis Davis, Kissimmee; Earl W. Brown, DeLand; Edward C. Roe, Jacksonville; Frank D. Jackson, Tampa; Clyde A. Byrd, Daytona Beach; Charles Vaughn, Umatilla; Dr. A. J. Hanna, Winter Park; Dr. I. N. Kennedy, Tallahassee; A. J. Robida, Jacksonville; R. H. Simpson, Monticello; H. R. Aiken, Miami; James J. Murphy, Jacksonville; Harry McCreary, Tarpon Springs; Dr. Herbert R. Mills, Tampa; Frank J. Mallants, Miami; John T. Ardis, Miami Beach; J. T. Hurst, Tallahassee; E. C. Wimer, West Palm Beach.

CLEWISTON SUGAR CANE HARVEST COMPLETED

The 1944-45 sugar cane harvest at the United States Sugar Corporation came to a close April 14 with approximately 90,000 more tons of cane harvested this year than last, in 25 days less time, according to figures released by company officials.

"This increased harvest in a shorter period of time is due largely to an improvement of the labor supply through the recruitment program of

the War Foods Administration, which made available a plentiful supply of workers from Jamaica," Jay W. Moran, vice president and general manager of the company said. Final production figures have not yet been completed.

The bulk of the labor supply during the current season has been Jamaicans with a small percentage of domestic labor. The 350 war prisoners working for the corporation have been used largely in cultivation and planting operations.

These Jamaican laborers are now being moved into other farming areas of the country, but a new supply is being obtained by the corporation for planting and cultivation during the summer months.

In spite of adverse weather conditions in December and January when very low temperatures were recorded, there was only a negligible loss in cane tonnage, and during the season approximately 24,000 acres of cane were harvested.

"The record of grinding time has been very good and despite the difficult labor supply at the sugar house, it has operated at a very high degree of efficiency," Moran said.

The harvest season lasted 157 days in comparison with 182 days for the previous season. Moran stated that next season even more sugar may be expected as there will be an increase in the acreage planting, which should

result in a substantial increase in the harvest of the next crop.

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MUSEUM DISPLAYS VALUABLE GEODES FROM TAMPA BAY

Don't ignore those unusual mineral formations you see occasionally when swimming in Tampa Bay, for if you do you are ignoring a fortune, according to James G. Manchester, who ought to know.

Several years ago Mr. Manchester became interested in these coral-like formations and discovered that they contain rare chalcedony, a semi-precious stone jewelers are begging for these days.

Mr. Manchester has placed many specimens of these mineral formations, called geodes, into the hands of jewelers for refinishing into precious stones of from 1 to 10 carats. The rocks, weighing about three pounds, interested Manchester, not only as a means of making money but as a hobby.

His recent book, "The Geodes of Hillsborough Bay," describes in detail the hundreds of geodes he has discovered and expresses his belief that there are millions more lying now in Tampa Bay, waiting for some enterprising person to dig them out.

HOW WE TALK

Now, I'm not saying that we Southerners are without fault, much, much fault, in our pronunciations—not to speak of our grammar! We slur our words, drawl them out, we cut them short, and substitute vowel sounds "something awful!" We say, for example—"sump'n," "star-ur," "readin'" and "wawder." We say "aintchergoner," "whatchergohndoodernight," and "doncherreckin." We say "poah," "thaink" and "goner." We say a million "things," perhaps, incorrectly. But, put it all together, and it sounds much more like American than does de lingo what dem guys uses what come fum de Noith.—Floyd Tillery, in West Point (Ga.) News.

Writing in the current issue of Aviation News, Robert L. Smith, president of the Mission Nurseries and Florists, Inc., of Los Angeles, envisions "camellia corsages picked in the morning, packaged in individual acetate containers by midday and flown to New York for sale the following morning." He predicts that air transportation of cut flowers will make southern California the "flower basket of the Nation." Mr. Smith overlooks the fact that Florida-grown flowers could reach the Nation's markets for sale the same day they were picked.

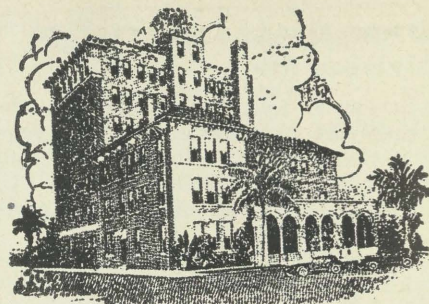
RECORD ON LYNCHINGS MORE THAN "IMPROVED"

In spite of the fact that there have been only two lynchings in the United States this year and were only three in 1943, the best comment one news weekly can make is that "the record has improved."

"Between 1900 and 1941," it states, "the Nation had 4,699 lynchings on its conscience," thereby implying that there has been more than 100 lynchings a year as a regular thing.

Nothing could be farther from the truth.

From 1900 the number of lynchings in this country has regularly decreased until they have practically vanished. In 1901 they numbered 130. By 1910 they had dropped to 75, and by 1920 to 61. In 1930 the number was down to 21.—Tampa Times.



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NOTHING IS MORE IMPORTANT THAN WATER

(Continued from page 9)

attract labor, it can ship in raw materials and ship out finished products but it cannot do without an adequate water supply close at hand. The same is true of every other productive occupation or activity. The future of our State and its people, therefore, depends to a greater extent than upon anything else on the supply of fresh water in Florida.

No other subject could, consequently, have as much importance to the State and its people. No other action of the 1945 legislature could be as vital, as sound provision to safeguard Florida's fresh water supply against damaging loss and dissipation.

Other things we may need but water we must have to live.

WATER AND AGRICULTURE

(Continued from page 16)

as a means of reaching larger surfaces.

The mandate of nature says "control or perish," and we can take our choice. Lack of mastery of water has depopulated millions of acres in various parts of the world. Teeming populations once prospered in parts of Asia and in Southern Europe, which today support a meagre population.

Quick drainage and erosion have caused poor soils and short crops over a large area of the United States.

Right now Florida is suffering from drought and the amount of the damage to citrus and vegetables will doubtless exceed the cost of conserving water in the most productive areas in the State.

FLORIDA PLANS TO SAVE WATER SUPPLY

(Continued from page 11)

plan, the committee said, but "a start should and must be made as soon as possible," because "an adequate supply of suitable water for all purposes along with control and protection against damaging kinds and amounts of water is fundamental to every person and thing in this State, and to the State itself."

FORT PIERCE NAVAL BASE IS INSPECTED

Adm. Jonas H. Ingram, commander-in-chief of the United States Atlantic fleet, has made his first inspection tour of the U. S. naval amphibious training base, Fort Pierce.

Accompanied by Capt. C. Gulbranson, base commanding officer, Adm. Ingram inspected the operations and training activities designed to prepare naval amphibious forces for the assault on the Japanese homeland.

War hath no fury like a non-combatant.

Royal Palm State Park Not Seriously Damaged By Fire

"An inspection of the Royal Palm State Park reveals that it is far from consumed by the fire that the heavy rain of April 9 quenched, current comments to the contrary notwithstanding," Ernest F. Coe, director, reports.

"Again the air over the area is now clear. A checkup on the damage done by the fire shows that while it is severe in sections, it is by no means universally so. There is ample evidence throughout the exposed areas that much heroic work was done to stem the flames by the firemen, civilians, and soldiers from nearby Homestead and vicinity," said Mr. Coe.

The fire damage was mostly south of the highway running through the park. It will be remembered that some fifteen years ago a disastrous fire swept over the east two-thirds of the park, north of the highway, and when the park lodge narrowly escaped being consumed.

W. C. Ohlert, State fire warden, stated that little physical damage to the burnt-over area will be conspicuous after several months have elapsed, at least as observed from the highway, and with few exceptions, anywhere throughout the park.

Many of the past frequenters will remember the dozen or more venerable old live oaks with their gardens of air plants festooning their trunks and branches and the giant Royal palms which give the park its name. These grand old trees, at least most of them show no signs of injury from the fire.

The footpaths of the C.C.C. boys made in the park several years ago extending from opposite the park lodge, down through the large forest tree section on the south side of the highway and to the east, made an effective barrier, cutting off the fire as

it spread through the underbrush as well as making easy access to the fire fighters. Many acres of the most valuable of the park's forest trees are within the area protected by this path. "It would have been well worthwhile," said Mr. Coe, "had many more of similar paths been made at the time, penetrating through the park generally. Had such paths existed it would have made fighting the recent fire far more effective. As it was, there were many areas where the forest growth was almost impenetrable for the fire fighters.

"Our Royal Palm State Park, later to be part of the Everglades National Park, is a precious heritage and dear to the hearts of the people. Though damaged by this recent fire, it is far from destroyed and for this we all have ample occasion to be very grateful," concluded the director.

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IT HAPPENED IN FLORIDA

(Continued from page 29)

twins. Her name is Susie, not that it matters.

★ A Jacksonville man slipped, scattered 200 packages of cigarettes over the street and sidewalk. What's more he got them all back, with the aid of helpful officers.

★ A Tampa hen, frustrated by the failure of eggs to hatch, stepped in and took the place of a mother dog in brooding a litter of new-born puppies. The puppies do not mind—except at lunchtime.

★ This is the story of a farmer who lost a son and found a daughter. Oscar L. Drawdy's wife died and their six-weeks-old baby girl was turned over to her maternal grandmother who moved away. Drawdy spent much time trying to trace them, offered a reward and employed an attorney but to no avail. He married again and had a son. The son was killed in the English channel and his picture was published in the Tampa Tribune. Some time later Drawdy received a letter from Texas which began: "My Dearest Daddy . . . I guess you wonder who I am but I think I am your little girl . . ." The long missing daughter, Mrs. E. S. Ginger, 28, of Corpus Christi came to Tampa for a reunion with the father she never had seen before, bringing with her two grandchildren of Farmer Drawdy that he did not know he had.

FIRE DESTROYS OLD LYKES HOMESTEAD AT SPRING HILL

The old Lykes home at Spring Hill, near Brooksville, one of the fine old landmarks of south Florida, where the seven noted Lykes brothers and their sister, Mrs. D. C. Gillett, were born and reared, was destroyed by fire.

Only one at home at the time was Mrs. Fred E. Lykes, and although people rushed from all around to help and Brooksville sent out its fire department, the house burned to the ground within 30 or 40 minutes and nothing was saved. It was more than 100 years old.

The whole roof was aflame before the fire was discovered by an employee on the farm. It was dusk, and Mrs. Lykes was preparing to go out for a walk.

She rushed back into get the keys of her automobile, but was able to save little else. Many family heirlooms and antiques were destroyed.

The homestead is on the old Bayport road about four miles out of Brooksville.

The Ramirez interests of Puerto Rico will construct a 1,500 ton sugar mill on their 20,000 acre farm in the Everglades. The concern now has 600 acres of growing cane and is increasing its plantings steadily. Other sugar operators of Puerto Rico operating in the 'Glades are the Seraillis, 30,000 acres, Jacoba Cabassa, 6,400 acres, The Cabrera Company, 9,000 acres, the Miniz-Rodriguez Brothers and Alverto Esteves, 5,000 acres. These operations are in addition to the development of the United States Sugar Corporation of Clewiston.

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WATER SUPPLY AND CATTLE

(Continued from page 22)

mum production only where the water in the soil is adequate and conserved throughout the year.

Scientific studies show that there is a direct relationship between the grazing capacity of range land and conservation of soil moisture. They also show that physical or economic losses resulting from change in season or cycles of precipitation are not the direct result of climate on cattle, but are the result of climate on pasture, and affect cattle by reducing the availability and nutrient value of the grass.

Man can do nothing to increase the amount of rainfall, but the cattlemen of Florida can either waste water or interest themselves in plans for its conservation and thus add to the productivity of their pastures and ranges.

ROADS AND WATER SUPPLY

(Continued from page 17)

interest is to construct the roads by interfering with the natural disposition of the surface water as little as is practicable. The grades are usually constructed to an elevation that will provide a two-foot clearance between the high water elevation and the bottom of the pavement. Where feasible ditches are constructed to lower the high water elevation in small ponding areas and small streams in order that the fill sections may be constructed as low as practicable and still get the minimum clearance above high water.

No attempt is made to lower the water in large streams and ponds. None of the drainage structures are designed to raise the water elevation on the upstream side or to create a ponding area where none previously existed.

In one isolated section in the vicinity of Orlando the general practice of the city of Orlando was followed and several drainage wells were constructed to divert the surface water to subterranean water channels. The State Road Department has constructed a total of five such wells, each well having a diameter of 12 inches. These wells have been constructed to a depth that will reach the underground cavities and the depths have varied from approximately 550 feet to approximately 750 feet. It is estimated that each of these wells will take 12 cubic feet per second.

In a few instances where it would would have been economically impracticable to construct the road grade above an extreme high water elevation that might be expected to occur only once every 40 or 50 years we

have constructed the grade several feet below the high water elevation. As an example the Bruce Creek bridge and fill approaches on State Road No. 88 approximately 7 miles south of Ponce de Leon were constructed last year with the grade 8 feet below a high water elevation caused by backwater from the flooded Choctawhatchee River in 1929.

The construction of roads has very little if any effect on the subterranean water supply and makes practically no contribution to the conservation of the surface water supply.

FLORIDA WATER SUPPLY

(Continued from page 15)

Water is the most important natural resource in Florida. Without it Florida would not be the winter vegetable center of the United States, the leading citrus producing State, or the "playground of America." Most of the cities of Florida are supplied with water from wells of varying depth, the depth depending on the section of the State and the formation from which the water is developed. In very few instances have municipalities utilized water from surface sources, such

as streams or lakes. In recent years, however, attention has been forced to these surface sources and shallow wells on account of depletion and change in quality of ground water in some areas, brought about through overdevelopment.

The ground water resources of Florida are dependent upon a number of factors that interact in a most complex manner. The precipitation, evaporation, temperature, topography, surface run-off, absorption by vegetation, transpiration through plants, character of the soil, and the nature of the underlying bedrock, each play an important role in determining the amount and quality of the ground water supplies. In a State as large as Florida, with an average annual precipitation ranging from less than 40 inches to more than 60 inches, and with an elevation from sea level to somewhat more than 300 feet, a diversity in

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ground water conditions is to be expected.

The accompanying geologic time table shows the several formations occurring in Florida. Some of these through their constant use have become familiar, while others are less known. Their general characteristics and especially their water-bearing capacities are indicated in the table.

All of the deposits present at the surface in Florida are geologically recent. From well cuttings, however, it has been learned that formations successively older are present, even to those postulated as Triassic or older. The underlying foundation rock throughout the State of import in this discussion is, however, a massive and rather thick limestone known as the Ocala from the typical exposures in and around the city of Ocala, Marion County. Limestones older geologically are likewise exposed in that general area, and these are also an important source of ground water for the deeper wells.

These limestones, that is the Ocala and the underlying older Eocene, extend throughout the State. Without question they are the most important formations in Florida as water sources. These limestones lie at or near the surface in the west central part of the peninsula from Lafayette and Dixie Counties through Alachua and Marion into Sumter and Citrus Counties. In western Florida, exposures occur in Jackson County. From these areas where they are the controlling surface formation these limestones dip and are found buried at slight or considerable depth beneath younger deposits. In the drilling of wells, however, their presence has been detected in every part of Florida.

Overlying the Ocala and Eocene limestones is a group of limestones of Oligocene age. As now subdivided four formations compose this group and since these are quite similar from a water supply standpoint they will not be discussed separately. These limestones are not so consistently present in every part of Florida as those just previously considered and for that reason only are they less important than the Ocala and older Eocene in generous water capacity. These formations are at the surface mainly in western Florida and in Hernando and bordering counties of the peninsula. Wells in other sections of the State obtain abundant supplies of good water when penetrated by drilling.

Of the five formations in the Miocene division, the Tampa limestone and the Hawthorn are the most important because of their character and wider areal extent through the State. The Duplin marl, Shoal River, and Chipola formations are best developed in western Florida, each being a very good source for water. The Hawthorn consists of limestone, clay, marl, and

sand, and yields variable quantities of artesian water which is generally less hard than that from the older limestones. In some parts of Florida the Hawthorn furnishes water with a rather high content of fluoride. This should be closely checked to see that the fluoride content is not sufficient to cause dental trouble.

The Tampa limestone is a good aquifer and is one of the important water-bearing formations throughout a large portion of the peninsula.

The Pliocene is extensively developed in Florida, but the water resources appear to be almost limited to two formations making up this group, the Tamiami of southern Florida, and the Citronelle, mainly in western Florida. The Tamiami bears the same relation to the Pliocene as does the Ocala to the Eocene, being the most important water bearer of the group.

It has been brought out in the investigations of the U. S. Geological Survey that "In the vicinity of Miami the Tamiami is one of the most highly permeable formations ever investigat-

ed . . . and ranks with clean, well-sorted gravel in its property of transmitting water." This is indeed fortunate for southern Florida and every precaution must be taken to safeguard this resource from contamination with salt water. The quality of water is good, but contamination with salt water has already occurred, therefore, the greatest caution must be exercised in properly developing supplies from this formation.

The youngest group of formations, the Pleistocene, is made up of limestones, marls, and sands, some of which are good to fairly good water-bearing formations. The best two of the group are perhaps the Miami oolitic limestone and the Anastasia formation, the latter having a much wider areal distribution, bordering the east

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coast for a varying width from the north line of the State to Palm Beach County. It is less extensively developed on the west coast.

In recent years the Anastasia formation has been quite intensively prospected and much is being learned about its water-bearing qualities. Owing to the high mineral content of the water from the deeper formations along the coast, much attention is being given to the upper or more shallow deposits. It seems quite probable that these upper formations will be utilized as a source of much water for municipalities and general domestic purposes.

MAKING WATER WALK

(Continued from page 19)

mus or top soil, erosion, the silting of stream channels, floods, the drying up of streams during drought periods.

Unseen, and almost unrealized, the ground supply on which man depends for his wells and water supply has been equally affected. The situation is assuming critical proportions in Florida where we have harvested the crop from some 25 million acres of original timberland and have largely ignored measures to reestablish any sort of ground cover.

On the contrary, we have deliberately swept the State annually with thousands of wild fires for the past several generations. The soil has been bared of all vegetation annually. Tree crops are prevented from reestablishment themselves. Litter is restricted to protected forest patches. Humus has totally disappeared from the soil throughout much of the State. Erosion gullies our land where the terrain is rough and sheet erosion removes the top soil on the flatter slopes. Many springs and streams have ceased to exist. Our water table has fallen to dangerous levels. Good croplands have become worthless for cultivation. The leisurely journey of rain water to its ocean ultimate which, under nature's control might be a matter of years, has become a mad rush of a fraction of that time.

We must find ways and means of again making water walk. The forests ask only an opportunity to help.

"Intelligent use of surplus stocks of government-owned aircraft equipment, as working tools for educational and technological aviation development can be made one of education's most valuable contributions to America's future air power"—Pres. E. R. Breech, Bendix Aviation Corp.

WATER, WATER EVERYWHERE?

(Continued from page 21)

Many modern industries require water cooler than 60 degrees. Air conditioning uses large amounts of ground water because it is the simplest and cheapest method. The easiest and cheapest method of obtaining cool water for industry is from the ground and this is one cause of the shortage.

Needless waste of water, air conditioning and increased use by modern industry, especially paper mills, which need up to 50,000,000 gallons of water a day of a temperature not above 60 degrees, have caused the need for the conservation of water in Florida. This need was realized near the beginning of the century when studies were begun. These studies have not been exhaustive, however, and little use has been made of the information gained.

Increased use of water for irrigation of agricultural products is another cause of depletion of ground water. The increased use of irrigation in citrus groves as well as irrigation of truck crops has helped lower the water table.

The fourth reason for depletion of

ground water is improper drainage. Many ditches and canals have been dug which allow the water to continually drain into the ocean and gulf.

A fifth reason for depletion of our water supply is the loss of flood waters. The burning over and destruction of forest lands has allowed the rainfall to run off in the streams faster, and thus to the ocean quickly, leaving little to go into the ground to replenish our ground water supply.

One of the dangers from the depletion of our ground water is encroachment

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ment of salt water in our artesian strata. All the peninsula of Florida is underlain by connate salt water, salt water contained in the rocks when they were laid down. Over most of the State, this saline water is confined to variable but relatively great depths. In areas where the fresh water head has been sufficiently reduced, however, the salt water has risen to or near the surface of the artesian strata. For every foot of fresh water head that is lost there is an upward encroachment of salt water for approximately 40 feet. This encroachment can be seen in Florida in certain counties near the coast where the loss of fresh water head has been excessive. At a well in Nassau County water with twice the salinity of sea water was found from 2,205 to 2,230 feet below the surface, and water at a depth of 4,500 feet in that well was about three times as saline as sea water. A large part of the waters used for irrigation in Seminole County are already highly saline.

It will be evident that if there is a very material reduction of the distant high water levels, from which pressure is obtained to produce artesian or flowing wells, the wells will cease to flow or become so greatly reduced in output that resort must be had to pumping. Unless something is done to save our fresh water, the time is not far off when groves and crops and pastures will seriously suffer.

Many groups in Florida have recently become concerned with the conservation of our water resources. Central Florida Incorporated, with headquarters in Orlando, was organized to develop navigation and promote the conservation and control of the inland waters of central Florida. The Florida Farm Bureau, the Soil Science Society, the Florida Forestry and Park Association, the Everglades Drainage District, the Scenic Highlanders, the State Department of Agriculture, the State Geological Department and all Soil Conservation Districts are seriously studying the problem. Most of them agree that conservation is desperately important and recommend that some provision be made for the beginning of a detailed water resource survey of Florida. By cooperation with the United States Geological Survey Federal funds are available to partly defray costs of both water resource and topographic surveys. It has also been suggested that regulations should be in force covering the drilling of all wells, water and oil. A system of locks to control the flow of water in all canals and drainage ditches, flood control, raising of lake levels and the storing of rainfall in the natural basins will help lift the underground water tables which have been progressively falling over a period of years. It seems advisable that the State of Florida should enact protective measures for water conserva-

tion. The regulations should be simple in character, based on those in force in other States which have been proven to be for the good of all.

The ease with which water can be obtained in this State and the bountiful supply of it has made us more or less extravagant and wasteful. The general impression seems to be abroad that there is no need for conservation or protection of this priceless resource. Such is not the case, as many now realize. In the final analysis, nothing stands between a fruitful Florida and a desert, except fresh water.

COUNTY ACTIVITIES

(Continued from page 27)

and replacement of road repair machinery.

■ Escambia County commissioners have agreed to repair the piers supporting the bascule span over canal bridge at Gulf Beach. This action was recommended by F. Elgin Bayless, chairman of the State Road Department, who attended their meeting to discuss the problem.

■ Sheriff John F. Kirk has asked the Palm Beach County commission to purchase three 2-way radios for installation in automobiles of his staff and for a receiver set for his office. The receivers would be hooked up to the State Highway Patrol and municipal police radios.

■ Dade County has issued one acre of public land to the West Little River Casualty Station. The property is to be improved with a rebuilt structure to be used as casualty station.

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FOURTH ESTATE

(Continued from page 5)

cent citizens of our communities take a direct, active, practical interest in politics they have no right to expect better conditions."

The governor declared that "it was distressing to me to note the widespread indifference that prevailed several years ago when our Nation remained unprepared in the face of unmistakable threats of world conflict.

"We were, I thought, in much the same position as a town council refusing to employ a policeman although armed robbers were known to be at large.

"As a result of that blind folly, our Nation suffered what might have been a mortal blow at Pearl Harbor * * *. To pacify impractical dreamers and theorists we are still fighting a war than we could have won months, if not years, ago had we been prepared for it."—Palatka Daily News.

Business Supplies The Answer

WHY SHOULD so many great business concerns continue spending huge sums on advertising when they have nothing to sell the public?

If you don't know the answer ask any of the 15 members of the advertising committee recently appointed by Governor Caldwell.

They know it so well that they believe the State of Florida should adopt the same policy.

So far as the immediate present is concerned, Florida doesn't need to advertise either. But that won't always be the case. The day is coming when we will want more tourists, more new industries, more investors, more permanent residents, and a wider distribution of our products and want them badly.

Business men realize that spending money to keep their names and the names of their products before the public even though they are able to sell more than they can produce is a good investment. They are looking forward to the time when they will need other customers to take the place of the United States government.

Because Governor Caldwell's committee sees Florida in a similar position it has recommended a million dollar appropriation annually to advertise the State. The duty of spending this money would be placed in the hands of a State Advertising Commission, with authority to employ a trained advertising director.

To the objection that Florida has no need for advertising now, there is one convincing answer. It can be learned through the easy process of listening to the radio for a few minutes any day or glancing through the pages of almost any newspaper or popular magazine.—Palm Beach Post.

Building For The Vets

MEMBERS OF Governor Caldwell's committee on a State advertising program, meeting last week in Silver Springs, pointed out a basic urgency and obligation in connection with the proposed million-dollar State advertising budget. If Florida is to provide jobs for all of its returning veterans, the admen said, it must hang on to every particle of its present expanded economy and continue to expand it by bringing new industries and enterprises into the State. The strongest lever with which to do this, they said, is a substantial advertising budget.

We might add that Florida must build, not only for the Florida boy who will be coming home but for the boy from another part of the country who has done some of his training in Florida and made up his mind that he wants to live here after the war. To such boys as this the State has already effectively advertised itself. But that only doubles the need to spread the word of Florida's great economic possibilities.—DeLand Sun News.

Voting Is Not Enough

CITIZENS WHO attended Founders Week exercises at Lakeland's Florida Southern College heard Governor Millard Caldwell make a pretty incisive analysis of modern politics. What

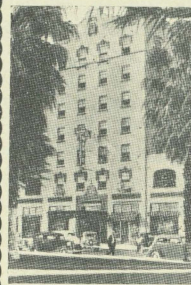
he had to say is particularly meaningful for Pensacolians as their municipal campaign gets underway.

"I do not know of a more dangerous citizen," said the governor, "than the well-informed, intelligent man of good motive who holds aloof from politics because it is 'dirty'." If we may lend the governor an image, we think he was speaking of the man who kicks about the dirt on the floor but refuses to touch a broom. Truly, he is dangerous.

"Voting is not enough," Mr. Caldwell said, "It is a vital part of community

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responsibility to see to it that good men offer themselves for office and that such men are supported by means and effort."—Pensacola News.

The Cade Plan

THE OCALA Star-Banner, commenting on the excellent address Governor Caldwell delivered at Florida Southern College last week to score aloofness toward politics, also takes occasion to refer to Mayor Cade's suggestion that Lakeland civic clubs join in bringing out a candidate for the city commission.

Says the Star-Banner:

"By different words and phrases, our governor is advocating practically the same thing that has only recently been advanced by Lakeland's mayor—that the civic clubs of that city, jointly, nominate a candidate, or candidates, for the city commission and then get out and elect them."

The Star-Banner goes on to comment that the greater personal interest in politics for which Governor Caldwell and Mayor Cade have appealed is the thing that is most needed to bring about "restoration of the prestige, rights and benefits of self-government."—Lakeland Ledger.

Caldwell Backs Educators

THE RECOMMENDATION of the Citizens' Committee on Education to allocate an additional six million dollars of State funds to the schools, yesterday received the backing of Governor Caldwell. This action of the governor's is in line with the pledges he made of full support for expanded school programs, and is indeed a bright omen as to the fate which the schools will meet at the hands of the coming session of the legislature.

Millard Caldwell would not have made this endorsement if he had had any doubts whatever as to the practicability of providing the necessary funds. There does not seem to be any way in which the legislators can evade the responsibility of putting through the major substance of the committee's recommendations. — Jacksonville Journal.

Governor Caldwell's trip through the Everglades National Park area gave him valuable first-hand information that he will make use of in speeding the completion of Florida's share in the establishment of the park. It was his first tour of the region, a fact that makes us want to ask if there are not many other influential men in Florida who should be making trips into that mysterious south Florida country, so that they, too, will come back determined to fight for its protection and conservation. — Melbourne Times.

Governor Millard Caldwell agrees

with us—or perhaps we should say, we agree with him, although we said it first—that this is no time to attempt to draft a new State constitution. With two hundred thousand men in the service—the best men, we might add, two hundred thousand men in the participate in the debate, and with most of the rest of us in an abnormal state of mind, anxious over the welfare of loved ones overseas, worried by the perplexities of home front problems, too busy to give it any serious thought anyway, we hesitate to think what would come out of a constitutional convention assembled at this time.—Sanford Herald.

Ulmer Hawkins, pro at the Hutcherson Golf Club, Lakeland, startled when a large rat jumped from his golf bag, attempted to stomp on it. He stomped so hard he threw his hip out of joint. The rat got away.

This is worth remembering. Speaking to, or crying over, a husband never did any good yet.—Rudyard Kipling.

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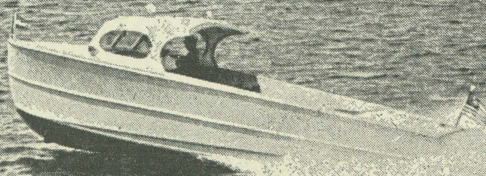
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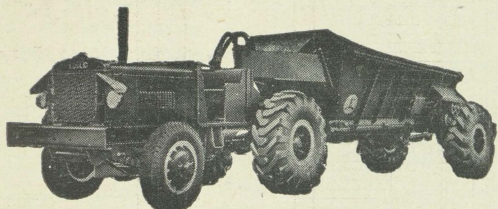
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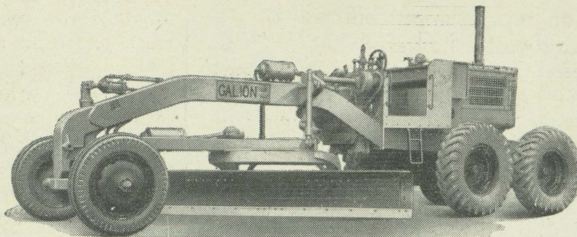
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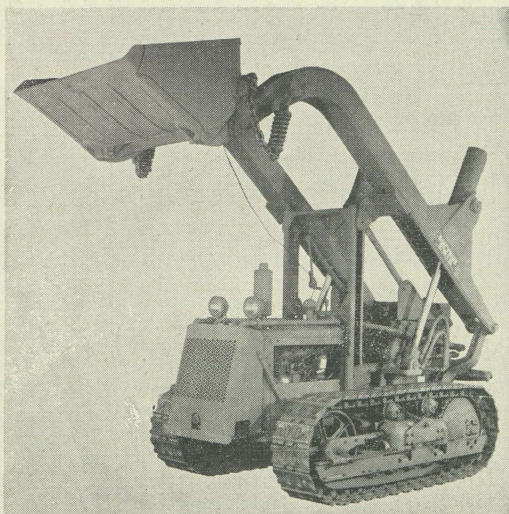
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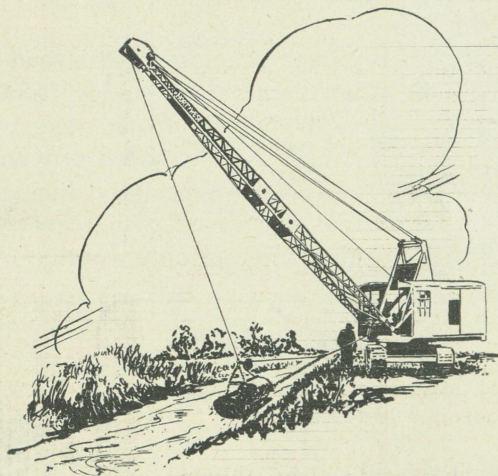
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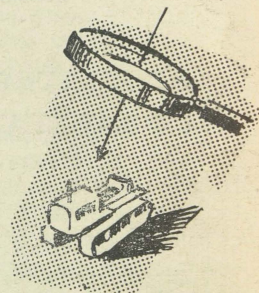
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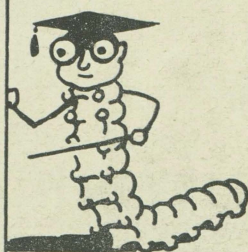
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